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January 18, 2017

VIA OVERNIGHT CARRIER

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

Re: Transmittal of the Technical Memorandum: August 2016 Surface-Water Sampling Results
Martin State Airport, 701 Wilson Point Road, Middle River, Maryland

Dear Mr. Carroll:

For your use and reference, please find enclosed two hard copies with CDs of the above-referenced document. This document presents the analytical results of the August surface water samples collected in Frog Mortar Creek adjacent to the Dump Road Area at Martin State Airport in Middle River, Maryland.

If you have any questions or require any additional information please contact me by phone at 240-687-1813, or via e-mail at paul.e.calligan@lmco.com.

Sincerely,

Paul E. Calligan, P.G.
Project Lead, Environmental Remediation
Lockheed Martin Corporation

cc: (via email without enclosure)
Anuradha Mohanty, MDE
Christine Kline, Lockheed Martin
Norm Varney, Lockheed Martin
Michael Martin, Tetra Tech
Peter Shilland, CDM Smith

cc: (via shipping courier; with enclosures)
Mark Williams, Maryland Aviation Administration
Al Pollard, Martin State Airport

cc: (via mail with CD enclosure)
Jann Richardson, Lockheed Martin
Pete Lekas, EA Environmental

Technical Memorandum: August 2016 Surface-Water Sampling Results for Frog Mortar Creek Martin State Airport 701 Wilson Point Road Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

Prepared by:

Tetra Tech, Inc.

January 2017



Michael Martin, P.G.
Regional Manager



Anthony Apanavage, P.G.
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ACRONYMS

AWQC	ambient water quality criteria
BTAG	Biological Technical Advisory Group
BTEX	benzene, toluene, ethylbenzene, and xylenes
cis-1,2-DCE	*cis*-1,2-dichloroethene
COMAR	*Code of Maryland Regulations*
cVOC	chlorinated volatile organic compound
DRA	Dump Road Area
EL	Edwards Lane
GIS	geographic information system
IDW	investigation-derived waste
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment
MDANG	Maryland Air National Guard
mg/L	milligram(s) per liter
MSA	Martin State Airport
µg/L	microgram(s) per liter
NOAA	National Oceanic and Atmospheric Administration
NRWQC	national recommended water quality criteria
PDF	portable document format
PPE	personal protective equipment
SVOC	semivolatile organic compound
TB	trip blank
TCE	trichloroethene
Tetra Tech	Tetra Tech, Inc.
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this technical memorandum presenting sampling results for surface water samples collected in Frog Mortar Creek adjacent to the Dump Road Area (DRA) at Martin State Airport (MSA) in Middle River, Maryland (see Figure 1-1). Surface water was sampled according to the *2016 Surface Water Sampling Work Plan* (Tetra Tech, 2015). This technical memorandum presents the analytical results for surface water samples collected from Frog Mortar Creek on August 15, 2016. This investigation obtained additional chemical and spatial-distribution data for volatile organic compounds (VOCs) and metals in creek surface water that might emanate from a groundwater plume at the Dump Road Area of Martin State Airport, and from volatile organic compounds from possible upgradient sources. Results herein are compared to screening levels intended to protect human health and the environment. These data will provide information to:

- evaluate the interaction between Frog Mortar Creek and shallow groundwater in the Dump Road Area
- assess possible localized seepage of contaminated groundwater to creek surface waters, using sampling locations for nine established western-shoreline transects, four single-sample locations between transects, and one eastern-shoreline transect
- assess human health risks for recreational users of Frog Mortar Creek
- update modeling for shallow-groundwater flow patterns and groundwater discharge to Frog Mortar Creek

This technical memorandum is organized as follows:

Section 2—Site Background and Previous Investigations: Briefly describes the site and previous Frog Mortar Creek investigations.

Section 3—Investigation Approach and Methodology: Presents the technical approach and field methodology used for surface water sampling.

Section 4—Results: Presents the investigation results.

Section 5—Summary: Summarizes the investigation approach and results.

Section 6—References: Cites references used to compile this memorandum.

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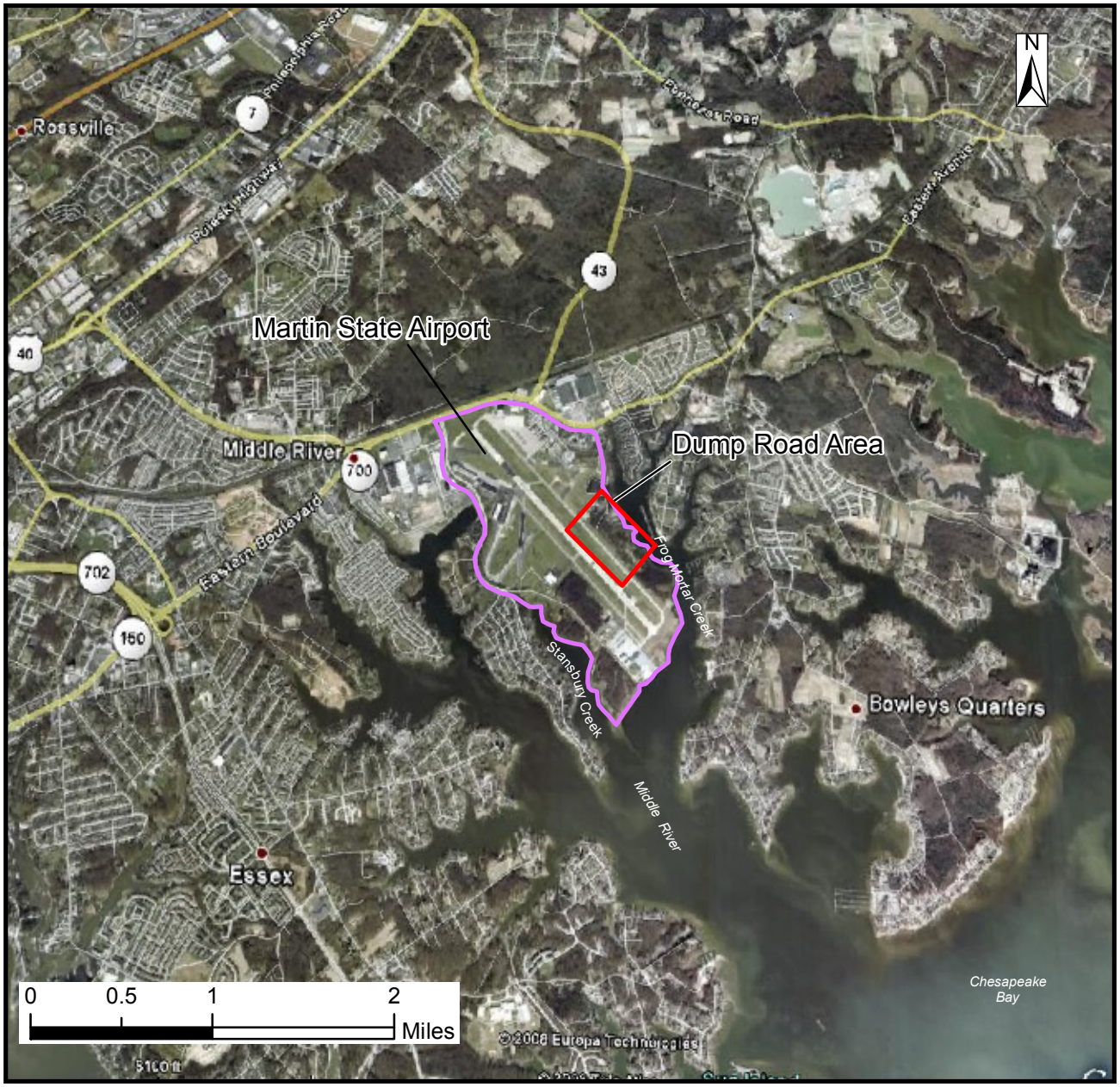

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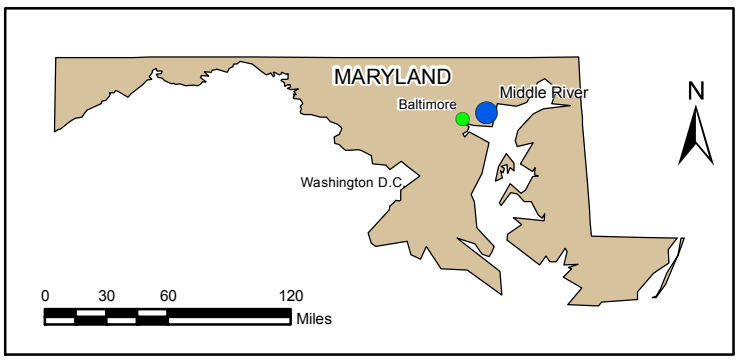

FIGURE 1-1

MARTIN STATE AIRPORT, DUMP ROAD AREA, AND FROG MORTAR CREEK LOCATION MAP

Frog Mortar Creek
Lockheed Martin, Martin State Airport
Middle River, Maryland

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TETRA TECH

Section 2
Site Background and Previous Investigations

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland and is bounded by Frog Mortar Creek to the east and Stansbury Creek to the west (Figure 2-1); both are tidal tributaries of Chesapeake Bay. The area under investigation is Frog Mortar Creek, which is east of and adjacent to the Dump Road Area (DRA) site at MSA (Figures 2-1 and 2-2). The DRA currently consists mostly of open meadows, mowed grass, and heavily wooded areas; however, it also includes a portion of Taxiway Tango and extends to the airport runway.

Taxiway Tango is a concrete and asphalt taxiway currently used by the Maryland Air National Guard (MDANG) for military aircraft operations. The airport runway is also used by state-owned and private aircraft. An extraction and treatment system for DRA groundwater is also under construction at the DRA site.

The extraction and treatment system under construction will consist of 16 groundwater extraction wells, underground piping, and a building that will house components to treat groundwater containing volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals at concentrations above Maryland Department of the Environment (MDE) groundwater standards. The wells and underground piping will pump groundwater from the surficial aquifer to the aboveground treatment building, creating a “hydraulic barrier” that will capture groundwater and prevent its contaminants from migrating off-site. The treatment building is 60 feet wide and 170 feet long (10,200 square feet); it is being constructed near Frog Mortar Creek in the east-central portion of the DRA (Figure 2-2), between wells DMW2A/B and DMW4S/I/D. Treated groundwater will be tested routinely and subsequently discharged to Frog Mortar Creek via an MDE-permitted outfall.

Detailed environmental studies have been conducted at the DRA since 1991, when the Maryland Aviation Administration removed drums discovered near Taxiway Tango (Figure 2-2). Subsequent environmental studies at MSA have demonstrated that soil, pond sediment, and groundwater at the DRA have been impacted by VOCs, SVOCs, and metals resulting from historical dumping and backfilling. The following constituents (and several metals) have been detected in DRA groundwater at concentrations exceeding state groundwater standards:

- ***chlorinated VOCs*** (cVOCs), including trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC)
- ***petroleum-related VOCs*** such as benzene, toluene, ethylbenzene, and xylenes (BTEX)
- ***metals*** arsenic, beryllium, cadmium, chromium, copper, hexavalent chromium (in two wells in 2008 only), iron, lead, manganese, mercury, nickel, selenium, thallium, vanadium, and zinc

Frog Mortar Creek is hydraulically downgradient of the DRA and receives groundwater that discharges from the DRA. The constituents listed above and several metals have been detected in surface water samples collected from Frog Mortar Creek. Surface water samples have been collected from Frog Mortar Creek since 1997, and multiple rounds of samples have been collected annually since 2010. Studies at Frog Mortar Creek from 1997–2015, and details of the area's physical setting, land use, physiography, and surface/subsurface conditions (i.e., soils, hydrology, and geology), are summarized in the *2015 Surface Water Sampling Report for Frog Mortar Creek* (Tetra Tech, 2016), and therefore are not repeated herein.



Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2011 ESRI and its data suppliers).

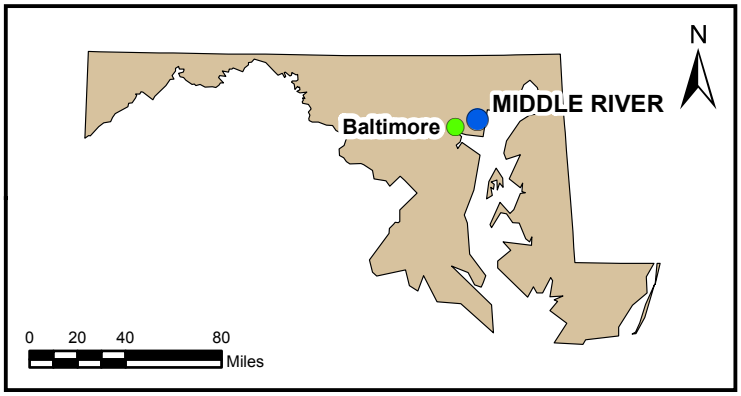

FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

Lockheed Martin, Martin State Airport
Middle River, Maryland

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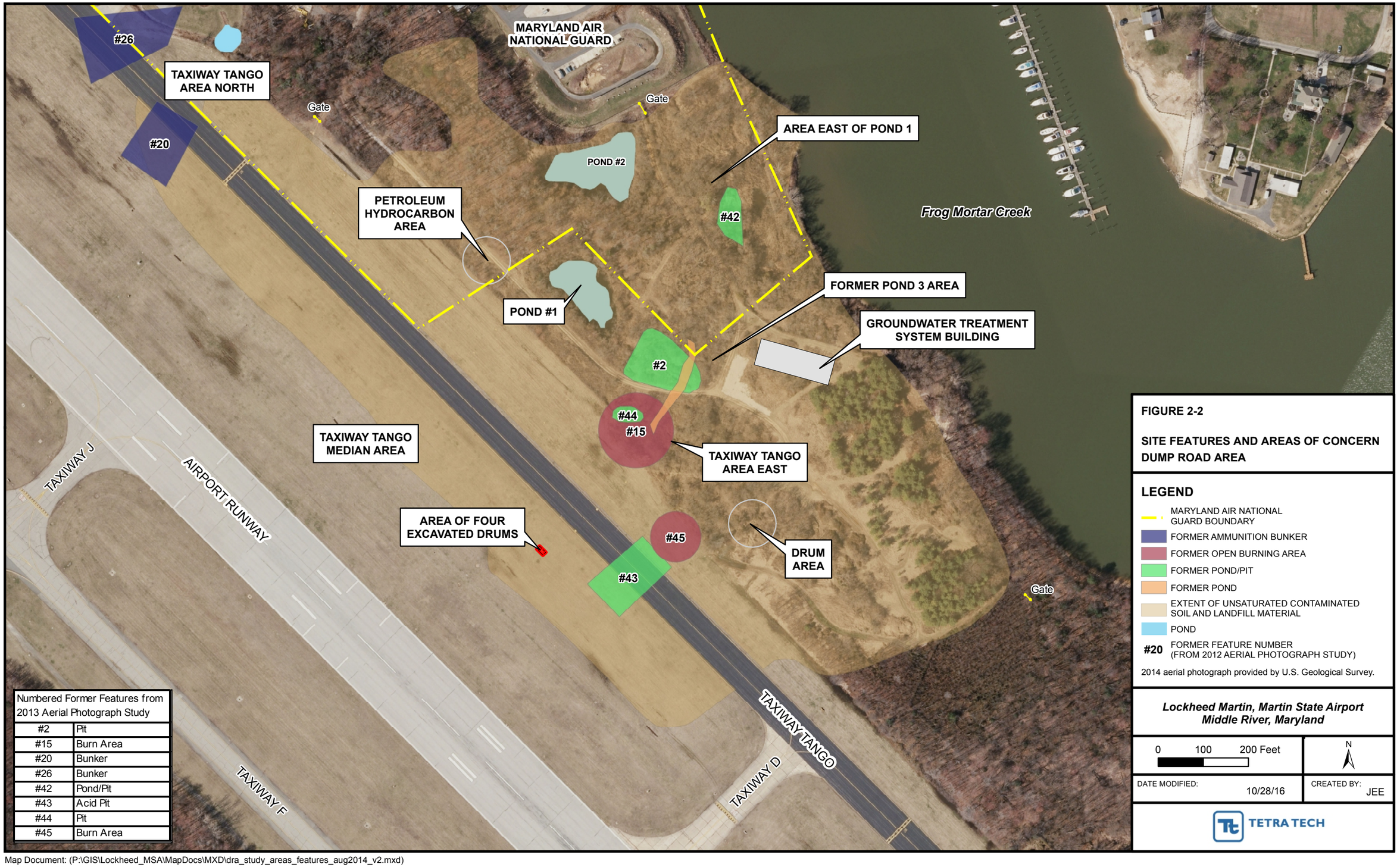

Numbered Former Features from 2013 Aerial Photograph Study	
#2	Pit
#15	Burn Area
#20	Bunker
#26	Bunker
#42	Pond/Pit
#43	Acid Pit
#44	Pit
#45	Burn Area

FIGURE 2-2

SITE FEATURES AND AREAS OF CONCERN DUMP ROAD AREA

LEGEND

- MARYLAND AIR NATIONAL GUARD BOUNDARY
- FORMER AMMUNITION BUNKER
- FORMER OPEN BURNING AREA
- FORMER POND/PIT
- FORMER POND
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND
- #20 FORMER FEATURE NUMBER (FROM 2012 AERIAL PHOTOGRAPH STUDY)

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

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

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TETRA TECH

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Section 3
Investigation Approach and Methodology

Previous surface-water sampling data for Frog Mortar Creek support the need for additional investigations to assess the extent to which surface water is affected by groundwater discharged from the Dump Road Area (DRA). The volatile organic compounds (VOCs) trichloroethene (TCE) and vinyl chloride (VC), and several metals, have previously been detected in Frog Mortar Creek surface water samples at concentrations exceeding ecological and/or human health screening-criteria; these analytes have also been detected in groundwater at the DRA. Surface water data obtained from Frog Mortar Creek were used to evaluate detected chemical concentrations by comparing them to United States Environmental Protection Agency (USEPA) or Maryland screening levels. These screening criteria include USEPA national recommended water quality criteria (NRWQC), Maryland ambient water quality criteria (AWQC), USEPA Biological Technical Advisory Group (BTAG) surface water screening-benchmarks, and site-specific screening levels for swimming developed by Lockheed Martin Corporation (Lockheed Martin).

The August 2016 sampling is the fourth of six surface-water sampling rounds planned for 2016. The August sampling round assessed water quality in summer, when substantial water-recreation is expected in Frog Mortar Creek. The next sampling round is scheduled for September 2016.

3.1 SURFACE WATER SAMPLING

3.1.1 Surface Water Sampling and Chemical Analyses

Forty-four surface water samples from Frog Mortar Creek were collected adjacent to the DRA site on August 15, 2016. Sampling locations are shown on Figure 3-1. Four samples were collected along each of nine transects spaced approximately 350 feet apart along the western shoreline of the creek; these transects are designated MSA-SW37, MSA-SW38, MSA-SW39,

MSA-SW40, MSA-SW41, MSA-SW42, MSA-SW43, MSA-SW44, and MSA-SW45. Four samples were also collected along a transect extending out from the eastern shoreline of the creek at 3301 Edwards Lane (EL); this transect is designated EL-SW01 (see Figure 3-1). Four additional near-shore samples were collected between transects MSA-SW42 and MSA-SW40 (MSA-SW46A), MSA-SW40 and MSA-SW38 (MSA-SW47A), MSA-SW38 and MSA-SW41 (MSA-SW48A), and MSA-SW41 and MSA-SW43 (MSA-SW49A). These four locations were first sampled in July 2015 to assess constituent concentrations between transects exhibiting the highest VOC concentrations, and are included in all 2016 sampling rounds.

Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), one was collected approximately 100 feet from the shoreline ("C" sample), and one was collected approximately 200 feet from the shoreline ("D" sample). All samples were collected approximately one foot below the water surface. All sampling locations were surveyed in the Maryland State Plane North American Datum 1983 (in feet), using a handheld global positioning system receiver.

Table 3-1 outlines the sampling and chemical analyses program. Western-shoreline transect samples (MSA-SW37 through MSA-SW45) were analyzed for the following constituents:

- VOCs, by SW846 Method 8260C (including Freon 113 [1,1,2-trichloro-1,2,2-trifluoroethane], Freon 22 [chlorodifluoromethane] and tentatively identified compounds)
- dissolved metals (filtered in the field), by SW846 Methods 6020/7470A
- hardness, by Standard Method SM 2340B
- hexavalent chromium, by USEPA Method 218.6

Historically, concentrations of metals (other than arsenic and barium) above screening criteria have been predominantly in areas adjacent to or near the western shoreline. Additionally, metal concentrations (except barium) in eastern shoreline-transect samples (i.e., EL-SW01A–D) collected in 2012 were less than the screening criteria; therefore, the eastern shoreline-transect samples were not analyzed for metals and were analyzed only for VOCs. The four between-transect samples collected on the western shore (i.e., samples at SW46A, SW47A, SW48A and SW49A) were analyzed for VOCs and 1,4-dioxane. Samples from four other

near-shore locations (SW38A, SW40A, SW41A, and SW42A) were analyzed for 1,4-dioxane to provide 1,4-dioxane data for a warm-water period. Sampling for 1,4-dioxane was requested by the MDE Controlled Hazardous Substance Division. Hexavalent chromium and total chromium have been detected in DRA groundwater; therefore, all western-shoreline samples except SW46A–SW49A were also analyzed for hexavalent chromium. Water quality parameters (including temperature, pH, specific conductance, salinity, turbidity, dissolved oxygen, and oxidation-reduction potential) were measured and recorded at the time of sampling, as was the water depth at all surface-water sampling locations. Sampling information was documented on sample log sheets (see Appendix A).

Water depth measurements were also obtained from the staff gauge at 3301 Edwards Lane before (2.75 feet at 0850 hours) and after (2.04 feet at 1327 hours) sampling. Mean tidal-flux in the Middle River, Maryland area is approximately 1.6 feet (National Oceanic and Atmospheric Administration [NOAA], 2015). A 2011 study by Lockheed Martin sought to ascertain the effects of tides and sampling depths on contaminant concentrations in Frog Mortar Creek (Tetra Tech, 2012). The tidal phase relative to the time of sample collection appears to influence the VOC concentrations detected, particularly in the samples collected 50 feet from shore. In general, VOC concentrations in "B-series" samples (collected 50 feet from shore) were greater at low tide than at high tide, irrespective of sampling depth. Therefore, during this sampling round, all samples were collected during low tide.

Samples were collected as grab samples from approximately one foot below the water surface using the direct-fill sampling technique. VOC samples were collected using a stainless steel discrete-interval sampler (also known as a "bacon bomb" sampler). The sampler was lowered to approximately one foot below the water surface, the check valve was engaged to allow the sampler to fill, the sampler was then brought to the surface, and the water was removed through a valve to fill three laboratory-cleaned, hydrochloric-acid preserved, 40-milliliter sample vials. The discrete-interval sampler was cleaned after each use by rinsing it with distilled water over the creek. No decontamination fluids were collected during this sampling.

Hexavalent chromium samples were collected in pre-cleaned bottles containing no sample preservatives (i.e., no nitric acid for preservation, as compared to other metal samples). Each bottle was submerged approximately one foot below the water surface and allowed to fill.

Hexavalent chromium samples were expedited to the laboratory so they could be analyzed within the prescribed 24-hour (since collection) holding time. Field-filtered metals samples (i.e., samples for metals other than hexavalent chromium) were collected using a peristaltic pump and preserved to the appropriate pH level in the field with nitric acid. No duplicates were collected during this sampling round. A trip blank (one per cooler containing VOC samples) was submitted for VOC analysis for quality assurance/quality control purposes.

3.1.2 Documentation

A master site logbook was maintained as an overall record of site field activities. Sample documentation includes completed chain of custody forms and surface-water-specific sample log sheets. Chain of custody forms are standardized to summarize and document pertinent sample information, such as sample identification and type, matrix, date and time of collection, preservation, and the analysis requested. Sample-custody procedures document sample acquisition and integrity. Surface-water sample log sheets are in Appendix A. Chain of custody forms and data-validation reports are in Appendix B (on compact disc).

3.1.3 Sample Nomenclature and Handling

Surface water samples collected from transects MSA-SW37 through MSA-SW49 are identified with a unique sample identification tag. Surface water samples are labeled with an "MSA-SW" prefix, followed by the sample transect number, the profile location ("A," "B," "C," or "D"), and the six-digit sampling date. Similarly, surface water samples collected from Edwards Lane transects are identified with an "EL-SW01" prefix, the profile location ("A," "B," "C," or "D"), and the six-digit sampling date. For example, the surface water sample collected on August 15, 2016 from MSA-SW37A would be labeled "MSA-SW37A-081516." The trip blank was labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-081516).

Sample handling includes field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, and analyses requested. Proper custody procedures were followed throughout all phases of sample collection and handling. Chain of custody protocols were used throughout sample handling to assure the evidentiary integrity of

sample containers. These protocols demonstrate that the samples were handled and transferred in a manner that would prevent or detect possible tampering.

Sample containers were released under signature from the laboratory and accepted under signature by the sampler(s) or other individual(s) responsible for maintaining custody, until the sample containers could be transferred to the sampler(s). Transport containers returning to the laboratory were sealed with strapping tape and a tamper-resistant custody seal. The custody seal contains the signature of the individual releasing the transport container, along with the date and time.

3.1.4 Equipment Decontamination

This project required minimal equipment decontamination. Both dedicated and disposable equipment were used for surface water sampling to reduce the need for decontamination, and to eliminate potential cross-contamination of samples. The discrete-interval sampler was cleaned after each use by rinsing with distilled water. Equipment was cleaned over the (creek) water after each sample had been collected. No decontamination fluids were collected during this sampling.

3.1.5 Waste Management

Investigation-derived waste (IDW) consisted of personal protective equipment (PPE) and disposable equipment (filters, tubing, etc.) generated during field sampling. PPE IDW was brushed off, placed in trash bags along with the disposable equipment, and disposed of in a facility trash receptacle designated by facility personnel.

3.2 DATA MANAGEMENT

Laboratory data-handling procedures met the requirements of the laboratory subcontract. All analytical and field data are maintained in project files, including copies of chain of custody forms, sample log forms, sampling location maps, and documentation of quality assurance and data corrections.

3.2.1 Data Tracking and Control

A cradle-to-grave sample tracking system was used from the beginning to the end of sampling. The field operations leader began and coordinated sample tracking before mobilizing the sampling team to the field. Preprinted sample-container labels generated before fieldwork began were reviewed to ensure that they were accurate and adhered to work plan requirements. The

project manager coordinated with the analytical laboratory to ensure that the laboratory was aware of the number and type of samples and analyses that would be submitted.

During field sampling, the field operations leader forwarded the chain of custody to a designated project assistant and to the laboratory. The project assistant confirmed that the chain of custody provided the information required by the work plan. This allowed early detection of errors made in the field so that adjustments could be made before sample analyses. After successful completion of all requested analyses, the laboratory submitted an electronic deliverable for each sample delivery group. When all electronic deliverables had been received from the laboratory, the project assistant checked the laboratory submittal to determine whether the laboratory had performed all analyses requested. All analyses requested for this project were performed.

3.2.2 Sample Information

Data from field measurements were recorded using appropriate sample log sheets and were summarized in tabular form, as were the raw instrument-data from the laboratory. The field operations leader verified field data daily; laboratory data were verified by the group supervisor and then by the laboratory's quality control/documentation department. Sample log sheets are in Appendix A.

3.2.3 Project Data Compilation

The analytical laboratory generated an Adobe *Acrobat*® portable document format (PDF) file of the analytical data package, as well as an electronic database deliverable. The electronic database was checked against the PDF file provided by the laboratory, and updated as required based on data-qualifier flags applied during data validation. All data, such as units of measure and chemical nomenclature, were corrected as necessary to be consistent with the project database.

3.2.4 Geographic Information System

Data management systems for this investigation consist of a relational database and geographic information system (GIS) to manage environmental information pertaining to Martin State Airport (MSA). The relational database stores chemical, geological, hydrogeological, and other environmental data collected during environmental investigations. The GIS, created from the relational database, contains subsets of the larger data pool. The GIS allows environmental data

to be posted onto base maps to graphically represent project information. Compiled sampling, chemical, and positional data from this investigation were incorporated into the GIS.

3.3 DATA REVIEW

Data from the laboratory were entered into a sample database and evaluated against risk-based criteria. Data were validated (to evaluate data completeness, holding times, calibrations, precision, accuracy, laboratory and field-blank contamination, and detection limits) concurrent with the data evaluation. These reviews were based on the *USEPA Region III Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994) and the specifics of the analytical methods used. Data from this sampling event consist of chemical results for surface-water samples. Data-validation reports and chain of custody forms are in Appendix B (on compact disc) as PDF files. A table with all analytical data for August 2016 Frog Mortar Creek surface water samples, including nondetects, is in Appendix C.

Collectively, these data are acceptable for their intended uses (site characterization and risk assessment), except for data qualified as unreliable (UR flag). The data qualifiers (i.e., flags) listed below were applied to the chemical results presented in this report. Several flags appear in the chemical-results tables in Section 4, and all flags appear in Appendices B and C:

J The analyte is considered present in the sample, but is an estimated value that may not meet highest accuracy or precision standards. In this program, samples were qualified with "*J*" because quantitation was above the method detection limit but below the laboratory reporting-limit.

NJ The analyte has been tentatively identified. This qualifier indicates presumptive evidence of a compound. Special methods may be required to confirm its presence or absence in future sampling efforts.

U Not detected; the analyte is considered not detected at the reported value.

UJ The analyte is not detected. However, the quantitation or detection limit may be inaccurate or imprecise.

UR The analyte was not detected, but the result is unreliable due to serious deficiencies in satisfying quality control criteria.

Table 3-1

List of Samples and Chemical Analyses for Surface Water-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

	Analyses Performed[1] (Method)				
	Volatile Organic Compounds[2]	1,4-Dioxane	Dissolved Metals	Hexavalent Chromium	Hardness
Sample Location ID	(USEPA 8260C)	(USEPA 8270D SIM)	(USEPA 6020/7470A)	(USEPA 218.6)	(SM 2340B)
MSA-SW37A	X		X	X	X
MSA-SW37B	X		X	X	X
MSA-SW37C	X		X	X	X
MSA-SW37D	X		X	X	X
MSA-SW38A	X	X	X	X	X
MSA-SW38B	X		X	X	X
MSA-SW38C	X		X	X	X
MSA-SW38D	X		X	X	X
MSA-SW39A	X		X	X	X
MSA-SW39B	X		X	X	X
MSA-SW39C	X		X	X	X
MSA-SW39D	X		X	X	X
MSA-SW40A	X	X	X	X	X
MSA-SW40B	X		X	X	X
MSA-SW40C	X		X	X	X
MSA-SW40D	X		X	X	X
MSA-SW41A	X	X	X	X	X
MSA-SW41B	X		X	X	X
MSA-SW41C	X		X	X	X
MSA-SW41D	X		X	X	X
MSA-SW42A	X	X	X	X	X
MSA-SW42B	X		X	X	X
MSA-SW42C	X		X	X	X
MSA-SW42D	X		X	X	X
MSA-SW43A	X		X	X	X
MSA-SW43B	X		X	X	X
MSA-SW43C	X		X	X	X
MSA-SW43D	X		X	X	X
MSA-SW44A	X		X	X	X
MSA-SW44B	X		X	X	X
MSA-SW44C	X		X	X	X
MSA-SW44D	X		X	X	X
MSA-SW45A	X		X	X	X
MSA-SW45B	X		X	X	X
MSA-SW45C	X		X	X	X
MSA-SW45D	X		X	X	X
MSA-SW46A	X	X			
MSA-SW47A	X	X			
MSA-SW48A	X	X			
MSA-SW49A	X	X			
EL-SW01A	X				
EL-SW01B	X				
EL-SW01C	X				
EL-SW01D	X				

1 Temperature, pH, specific conductance, salinity, turbidity, dissolved oxygen, and oxidation reduction potential of each sample were measured and recorded in the field

2 Included Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane), Freon 22 (chlorodifluoromethane), and tentatively identified compounds

SIM - selective ion monitoring

SM - standard method

USEPA - United States Environmental Protection Agency



FIGURE 3-1

AUGUST 2016 SURFACE WATER SAMPLING LOCATIONS FROG MORTAR CREEK

LEGEND

- SURFACE WATER SAMPLING LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- OUTLINE OF FORMER COVE
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL - DUMP ROAD AREA
- POND

Samples collected August 15, 2016.
2014 aerial photograph provided by U.S. Geological Survey.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/03/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_samplocs_aug2016.mxd)
10/03/16 -- JEE

Section 4
Results

4.1 SURFACE WATER DATA AND SCREENING CRITERIA

Validated chemical data from the Frog Mortar Creek surface water samples collected in August 2016 were used to generate a statistical summary table (Table 4-1) and a table summarizing positive detections of chemical analytes (Table 4-2). Samples collected from western transects were analyzed for volatile organic compounds (VOCs) (including fuel-related compounds such as benzene, toluene, ethylbenzene, and xylenes [BTEX]), dissolved (i.e., filtered) metals, hexavalent chromium, and hardness. Samples from locations SW46A, SW47A, SW48A, and SW49A were analyzed for VOCs by SW846 Method 8260B. Eight near-shore samples were additionally analyzed for 1,4-dioxane. The eastern-shoreline-transect samples (e.g., EL-SW01) were analyzed for VOCs only, for the reasons described in Section 3.1.1. Table 4-2 compares surface water sampling results to several applicable screening criteria, including:

- United States Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) freshwater screening-benchmarks (USEPA, 2006)
- USEPA national recommended water quality criteria (NRWQC) for acute and chronic aquatic-organism exposures, and NRWQC for human health aquatic-organism-consumption (USEPA, 2002, 2009)
- Maryland ambient water quality criteria (AWQC) for acute and chronic aquatic-organism exposures, and AWQC for human health aquatic-organism-consumption (*Code of Maryland Regulations* [COMAR], 2016)
- Massachusetts drinking water guideline for 1,4-dioxane (USEPA, 2014)
- site-specific screening levels for swimming developed for trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC)

NRWQC, AWQC, and most BTAG screening levels for metals represent concentrations of dissolved metals in the water column; therefore, only dissolved-metals analyses were performed.

BTAG screening levels for arsenic, mercury, molybdenum, selenium, and thallium are based on total metals concentrations. Since only dissolved metals were analyzed during this sampling round, results for these metals are not directly comparable to BTAG criteria. NRWQC and BTAG screening values for four dissolved metals (copper, lead, nickel, and zinc) were adjusted using the USEPA-recommended value for hardness (400 milligrams per liter [mg/L]) provided in *National Recommended Water Quality Criteria* (USEPA, 2002, 2009) and *Region III Biological Technical Advisory Group Freshwater Screening Benchmarks* (USEPA, 2006). This value is recommended by USEPA when site-specific data indicate high hardness levels (i.e., greater than 400 mg/L), as was reported during this sampling round.

USEPA and several states have established various health advisories, guidelines, notification levels, and cleanup standards for 1,4-dioxane. At present, Maryland does not have a guideline or standard for 1,4-dioxane. Although Frog Mortar Creek is not used for drinking water, recreational users can be exposed to constituents in the creek. Therefore, a conservative (i.e., protective of human health and the environment) concentration of 0.3 micrograms per liter (µg/L) (Massachusetts drinking water guideline) is used to screen the 1,4-dioxane results. TCE, *cis*-1,2-DCE, and VC results are also compared to site-specific screening levels developed by Lockheed Martin Corporation (Lockheed Martin) at the request of the Maryland Department of the Environment (MDE); these values are used to assess risks posed to recreational users of Frog Mortar Creek. These screening levels were developed to protect the health of swimmers near the Dump Road Area (DRA) shoreline, assuming that they have long-term exposure to surface water (i.e., assumed swimming of four hours per day, 70 days per year, for 30 years). These swimming criteria are used because they provide the most conservative (i.e., most protective) screening levels for Frog Mortar Creek.

Gray shading in Table 4-2 indicates a result that exceeds one or more of the constituent's surface-water screening criteria. Figures 4-1 through 4-3 show the concentrations of TCE, *cis*-1,2-DCE, and VC (respectively) detected in August 2016 Frog Mortar Creek samples. A table summarizing analytical data, including nondetect results and detection limits, is attached as Appendix C.

4.2 SURFACE WATER SAMPLING RESULTS

Nine VOCs, 1,4-dioxane, and nine metals were detected in the August 2016 surface water samples; results are summarized below and in Tables 4-1 and 4-2. Table 4-3 compares results for TCE, *cis*-1,2-DCE, and VC for this round (August 2016), the previous sampling round (July 2016), and the sampling round from one year ago (August 2015). Since most data discussed herein share the "MSA" prefix, this prefix is dropped when referring to transects or samples (e.g., "SW39" refers to transect MSA-SW39), to improve readability. Any discussion related to samples collected from the Edwards Lane transect (e.g., EL-SW01A) will be similarly identified (i.e., SW01A–SW01D) in the text. In addition, many of the lower VOC detections were estimated (i.e., *J*-qualified); these qualifiers (flags) are also dropped in the following discussion to improve readability (see Table 4-2 for these details).

4.2.1 Volatile Organic Compounds

The most frequently detected volatiles in August 2016 are the chlorinated VOCs (cVOCs) TCE, *cis*-1,2-DCE, and VC; these three VOCs are also the primary cVOCs detected in the DRA groundwater plume. Average cVOC concentrations detected in August 2016 (Table 4-3) are higher and are detected more frequently than they were in the previous sampling event (July 2016), and are three to seven times higher than a year ago (August 2015). Maximum concentrations of TCE, *cis*-1,2-DCE, and VC are also twice as high compared to last month and 10 times higher than a year ago. The highest TCE concentrations were detected at near-shore sampling locations SW49A (11 micrograms per liter [µg/L]), SW48A (7 µg/L), SW41A (6.9 µg/L), and SW38A (6.3 µg/L) along the southern and central portions of the DRA. The highest *cis*-1,2-DCE and VC concentrations were detected at SW48A (18 µg/L and 16 µg/L, respectively).

All VOC concentrations in the August 2016 surface water samples are less than human health consumption-of-organism and ecological screening-levels. However, one TCE concentration (11 µg/L) exceeds its swimming screening level (10 µg/L), and 13 VC concentrations (0.97-16 µg/L) exceed its swimming screening level (0.7 µg/L), predominantly in near- and mid-shore samples adjacent to the DRA. All *cis*-1,2-DCE concentrations are below its site-specific screening level for swimming (300 µg/L).

TCE was detected in 43 of 44 samples collected during this round, from both western and eastern shores, at concentrations ranging from 0.23 µg/L to 11 µg/L (Table 4-1 and Figure 4-1). In previous sampling, surface water samples from transects SW38, SW40, and SW41 (all on the western-shore of Frog Mortar Creek) have typically had the highest TCE concentrations. The August 2016 TCE results maintain this trend, except that the maximum concentration occurred farther to the south at location SW49A (11 µg/L). The highest TCE concentration detected in August 2016 is 11 µg/L (SW-49A), a concentration two times higher than the maximum TCE concentration in the last sampling round in July 2016 (4.7 µg/L), and 11 times higher than the maximum TCE concentration detected one year ago in August 2015 (1 µg/L).

Historically, TCE concentrations tend to decrease with increased distance from the shoreline, with the highest concentrations usually detected in shoreline ("A") samples. This trend is evident in the several central and southern transects (SW38, SW40, SW41, SW-43, and SW44) where higher-concentration gradients appear to be present. The trend is less evident in the other transects (e.g., SW37, SW-39, SW42, and SW45), where concentration gradients are lower or slightly reversed.

Consistent with previous sampling rounds, TCE concentrations in samples collected from the eastern shoreline transect (SW01) were lower than samples from the western shoreline transects. TCE was detected in the eastern-shoreline samples collected from transect SW01 with a narrow concentration range of 0.25–0.33 µg/L. TCE results in transect SW01 samples in August 2016 are slightly higher than those detected in July 2016 (0.22 µg/L), but are about 30% lower than the concentrations detected last year in August 2015 (0.41–0.46 µg/L).

cis-1,2-DCE was detected in 34 of 44 samples at concentrations ranging from 0.26 µg/L to 18 µg/L (Table 4-1 and Figure 4-2), and below the site-specific screening level for swimming of 300 µg/L). *cis*-1,2-DCE concentrations were generally highest in the central and south-central transects, with the highest concentration (18 µg/L) at SW48A; the next highest concentrations were detected at SW49A (15 µg/L) and at SW41A (12 µg/L). The highest concentration of *cis*-1,2-DCE in August 2016 (18 µg/L) is approximately two times higher than concentration detected last sampling round in July 2016 (9.6 µg/L) and more than 10 times higher than the maximum concentration detected one year ago in August 2015 (1.3 µg/L).

The concentration distribution is similar to that of TCE, and to the distribution of *cis*-1,2-DCE concentrations from previous rounds, with regard to its tendency to decrease with increased distance from the shore. As shown in Figure 4-2, this trend is clearly reflected by the *cis*-1,2-DCE concentrations from the August 2016 sampling round, with all but two western-shore transects showing decreased concentrations with distance from shore. VC was detected less frequently than TCE and *cis*-1,2-DCE during the August 2016 sampling round (in 18 of 44 samples; see Table 4-1). This pattern is similar to the previous round (13 of 44 samples in July 2016), but more frequent than last year (four of 44 samples in August 2015). VC concentrations detected in August 2016 range from 0.38 µg/L to 16 µg/L (Table 4-1). Similar to 1,2-DCE, VC was detected at sampling locations along the central portion of the DRA, with the highest concentration (16 µg/L) at SW48A; the next highest concentrations were detected at SW38A (7.8 µg/L) and at SW49A (7.5 µg/L). VC was not detected in northern and southern transects (SW37, SW39, and SW45), the eastern shoreline transect (SW01), or in any far-shore ("D") sampling locations.

The maximum VC concentration detected during this round (16 µg/L at SW38A) is more than twice the maximum recorded in July 2016 (7.5 µg/L at SW43A), and is more than 20 times the maximum in August 2015 (0.66 µg/L at SW48A). During this sampling event, VC concentrations at 13 locations exceed the screening level for swimming (0.7 µg/L): SW38A (7.8 µg/L), SW38B (4.4 µg/L), SW40A (1.5 µg/L), SW40B (0.97 µg/L), SW41A (6.8 µg/L), SW41B (5.3 µg/L), SW42A (4.3 µg/L), SW42B (5.4 µg/L), SW42C (2 µg/L), SW46A (1.5 µg/L), SW47A (1.9 µg/L), SW48A (16 µg/L), and SW49A (7.5 µg/L). VC concentrations exceeded the swimming screening level at five locations in July 2016 (the previous sampling round), and no concentration exceeded the screening level in August 2015 (one year ago).

Six additional VOCs (carbon disulfide, 1,3-dichlorobenzene 1,4-dichlorobenzene, *m+p* xylenes, *o*-xylene, and toluene) were detected at concentrations less than ecological screening levels. Three VOCs (acetone, 1,4-dichlorobenzene, and toluene) were detected in addition to TCE, *cis*-1,2-DCE, and VC during the last round in July 2016, and one additional VOC (toluene) was detected a year ago in August 2015.

4.2.2 1,4-Dioxane

1,4-Dioxane was detected in one of eight samples (0.72 µg/L at SW48A) (Table 4-1 and Figure 4-2). SW48A is near the central portion of the DRA where the highest concentrations of most VOCs were detected this round (SW48A contained the maximum concentrations of all VOCs except TCE, toluene, and carbon disulfide). 1,4-Dioxane was not detected in other near-shore "A" samples collected this round. The concentration exceeds its screening level criterion (0.3 µg/L), a surrogate Massachusetts screening value because Maryland has no screening value for this constituent.

4.2.3 Metals

Concentrations of dissolved barium (30–45 µg/L) at all 36 locations (for which barium was analyzed) exceeded its lowest screening level (4 µg/L). The highest barium concentrations were detected primarily in samples collected south of the DRA (eight of the highest concentrations were in transects SW44, SW45, and SW39). Barium concentrations in August 2016 are slightly lower than, but similar to, those detected last round in July 2016 (40–47 µg/L), and are higher than last year in August 2015 (14–15 µg/L). Barium is ubiquitous in creek samples, and has been detected at varying narrow concentration ranges in all samples collected in the creek since its first analysis in 2010.

Arsenic concentrations (1.8–2.9 µg/L) were detected in 34 of 36 locations (for which arsenic was analyzed) this round. All concentrations exceeded the lowest arsenic screening level (1.4 µg/L). Arsenic concentrations in August 2016 are slightly lower than those detected last round in July 2016 (2.5–2.9 µg/L), but are slightly higher than concentrations detected last year (2-2.2 µg/L in August 2015). As with previous sampling rounds, the August 2016 arsenic concentrations are within the range of arsenic background concentrations (2.2–3.9 µg/L) detected in samples collected as part of Lockheed Martin's larger-scale 2007–2008 Frog Mortar Creek investigation (Tetra Tech, 2009).

4.2.4 Hexavalent Chromium

Hexavalent chromium has been detected in DRA groundwater and was therefore analyzed for in surface water samples collected in August 2016 and in previous sampling rounds. Hexavalent chromium was not detected in the August 2016 Frog Mortar Creek samples. Previous sampling

indicated the intermittent presence of hexavalent chromium in Frog Mortar Creek samples at low concentrations within narrow concentration ranges (e.g., 0.028–0.085 µg/L in March 2015, 0.12-0.16 µg/L in June 2015, and 0.12–0.18 µg/L in March 2016). Hexavalent chromium was not detected in samples collected in July 2016, but was detected at all 36 locations sampled in August 2015 (0.1–0.16 µg/L). August 2016 results are consistent with previous sampling results indicating that hexavalent chromium concentrations are below the most protective (i.e., lowest) ecological screening criterion used for Frog Mortar Creek.

4.3 UPCOMING 2016 SAMPLING ROUNDS

Lockheed Martin will sample surface water at the same Frog Mortar Creek sampling locations in September and December 2016.

Table 4-1

Summary of Analytes Detected in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin Middle River Complex, Middle River, Maryland
Page 1 of 2

Parameter	August 2016 Frog Mortar Creek Surface Water Samples								
	Frequency of detection		Minimum concentration detected	Maximum concentration detected	Minimum concentration non-detect	Maximum concentration non-detect	Sample(s) of maximum concentration detected	Average of detected results	Average of all results[(1)]
	Number	Percent							
Volatile organic compounds (µg/L)									
TRICHLOROETHENE	43/44	98	0.23 J	11	0.22 U	0.22 U	MSA-SW49A	1.86	1.82
CIS-1,2-DICHLOROETHENE	34/44	77	0.26 J	18	0.26 U	0.26 U	MSA-SW48A	3.27	2.55
VINYL CHLORIDE	18/44	41	0.38 J	16	0.29 U	0.29 U	MSA-SW48A	3.77	1.63
M+P-XYLENES	7/44	16	0.28 J	1.6 J	0.24 U	0.24 U	MSA-SW48A	0.59	0.19
1,4-DICHLOROBENZENE	4/44	9	0.27 J	0.87 J	0.27 U	0.27 U	MSA-SW48A	0.45	0.16
TOLUENE	4/44	9	0.59 J	1.1	0.23 U	0.23 U	MSA-SW44C	0.84	0.18
O-XYLENE	2/44	5	0.32 J	0.41 J	0.25 U	0.25 U	MSA-SW48A	0.37	0.14
TOTAL XYLENES	2/44	5	0.96 J	2	0.52 U	0.52 U	MSA-SW48A	1.48	0.32
1,3-DICHLOROBENZENE	1/44	2	0.19 J	0.19 J	0.19 U	0.19 U	MSA-SW48A	0.19	0.10
CARBON DISULFIDE	1/44	2	0.69 J	0.69 J	0.38 U	0.38 U	MSA-SW38A	0.69	0.20
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	1/1	100	1.3 NJ	1.3 NJ	--	--	MSA-SW39A	1.30	1.30
HEXANAL	2/2	100	1.1 NJ	1.7 NJ	--	--	MSA-SW38A	1.40	1.40
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	1/8	13	0.72 J	0.72 J	0.47 U	0.48 U	MSA-SW48A	0.72	0.30
Dissolved metals (µg/L)									
BARIUM	36/36	100	30	45	--	--	MSA-SW44B, 39C	38.94	38.94
COPPER	36/36	100	3 J	51	--	--	MSA-SW39D	6.72	6.72
NICKEL	36/36	100	1.4 J	2.7 J	--	--	MSA-SW39B, 41A, 43A, 44A	2.08	2.08
ARSENIC	34/36	94	1.8 J	2.9 J	1.8 U	1.8 U	MSA-SW37A	2.11	2.04
MERCURY	5/36	14	0.1 J	0.22	0.09 U	0.09 U	MSA-SW45B	0.15	0.06
ZINC	2/36	6	33 J	36 J	31 U	31 U	MSA-SW39D	34.5	16.6
COBALT	1/36	3	0.88 J	0.88 J	0.65 U	0.9 U	MSA-SW37A	0.88	0.34
LEAD	1/36	3	20	20	0.8 U	0.8 U	MSA-SW39D	20.00	0.94
SELENIUM	1/36	3	2.9 J	2.9 J	2.4 U	4 U	MSA-SW39D	2.90	1.31

Table 4-1

Summary of Analytes Detected in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin Middle River Complex, Middle River, Maryland
Page 2 of 2

Parameter	August 2016 Frog Mortar Creek Surface Water Samples								
	Frequency of detection		Minimum concentration detected	Maximum concentration detected	Minimum concentration non-detect	Maximum concentration non-detect	Sample(s) of maximum concentration detected	Average of detected results	Average of all results[(1)]
	Number	Percent							
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS $CaCO_3$	36/36	100	110	150	--	--	MSA-SW45A, 38C, 39A, 39C, 41D, 43C, 44A, 44B, 39B, 44D, 39D, 45D	140.56	140.56
HARDNESS AS $CaCO_3$	36/36	100	570	920	--	--	MSA-SW44B,39C	819.44	819.44
MAGNESIUM HARDNESS AS $CaCO_3$	36/36	100	460	770	--	--	MSA-SW44B	680.56	680.56

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
Page 1 of 12

Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	EL-SW01A EL-SW01A-081516 20160815	EL-SW01B EL-SW01B-081516 20160815	EL-SW01C EL-SW01C-081516 20160815	EL-SW01D EL-SW01D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	--	--	--	0.26 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.25 J	0.32 J	0.26 J	0.33 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	NA	NA	NA	NA
BARIUM	NA	NA	4	NA	NA	NA	NA	NA	NA
COBALT	NA	NA	23	NA	NA	NA	NA	NA	NA
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	NA	NA	NA	NA
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	NA	NA	NA	NA
MERCURY	1.4	0.77	NA [6]	NA	NA	NA	NA	NA	NA
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	NA	NA	NA	NA
SELENIUM	NA	5	NA [6]	4200	NA	NA	NA	NA	NA
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	NA	NA	NA	NA
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW37A MSA-SW37A-081516 20160815	MSA-SW37B MSA-SW37B-081516 20160815	MSA-SW37C MSA-SW37C-081516 20160815	MSA-SW37D MSA-SW37D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	--	--	--	--
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.24 J	0.3 J	0.25 J	0.25 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2.9 J	2.3 J	2 J	2 J
BARIUM	NA	NA	4	NA	NA	34	37	30	39
COBALT	NA	NA	23	NA	NA	0.88 J	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	5.3 J	4.8 J	5.8 J	7.5 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.3 J	1.9 J	1.9 J	1.9 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	130	140	110	130
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	760	790	570	780
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	630	660	460	640

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW38A MSA-SW38A-081516 20160815	MSA-SW38B MSA-SW38B-081516 20160815	MSA-SW38C MSA-SW38C-081516 20160815	MSA-SW38D MSA-SW38D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	0.33 J	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.69 J	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	10	7.4	0.99 J	0.51 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	6.3	5.5	1.3	0.72 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	7.8	4.4	0.43 J	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	1.7 NJ	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	--	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2.4 J	2.4 J	2.1 J	2 J
BARIUM	NA	NA	4	NA	NA	37	36	35	38
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3 J	5.1 J	6.8 J	6.5 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.3 J	1.4 J	1.4 J	1.9 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	140	140	150	140
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	810	820	860	790
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	670	680	720	660

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW39A MSA-SW39A-081516 20160815	MSA-SW39B MSA-SW39B-081516 20160815	MSA-SW39C MSA-SW39C-081516 20160815	MSA-SW39D MSA-SW39D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	0.35 J	0.26 J	0.26 J	--
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.24 J	0.23 J	0.23 J	--
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	1.3 NJ	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2.1 J	2.2 J	2.1 J	2.1 J
BARIUM	NA	NA	4	NA	NA	39	42	45	42
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3.1 J	3.3 J	4.2 J	51
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	20
MERCURY	1.4	0.77	NA [6]	NA	NA	--	0.14 J	0.17 J	0.1 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.4 J	2.7 J	2.3 J	2.3 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	2.9 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	36 J
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	150	150	150	150
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	840	870	920	900
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	700	720	760	750

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW40A MSA-SW40A-081516 20160815	MSA-SW40B MSA-SW40B-081516 20160815	MSA-SW40C MSA-SW40C-081516 20160815	MSA-SW40D MSA-SW40D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	3.1	2.2	0.42 J	--
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	3.9	4.3	0.72 J	0.37 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	1.5	0.97	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	1.1 NJ	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	--	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2.6 J	2.3 J	1.9 J	2.2 J
BARIUM	NA	NA	4	NA	NA	34	37	36	41
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	4 J	5.7 J	5.9 J	7.9 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.4 J	1.8 J	1.5 J	1.8 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	140	140	130	140
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	790	810	760	800
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	650	670	630	670

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW41A MSA-SW41A-081516 20160815	MSA-SW41B MSA-SW41B-081516 20160815	MSA-SW41C MSA-SW41C-081516 20160815	MSA-SW41D MSA-SW41D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	0.33 J	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	12	11	0.44 J	0.34 J
M+P-XYLENES	NA	NA	13	NA	NA	0.32 J	0.28 J	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	6.9	6.1	0.54 J	0.47 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	6.8	5.3	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	--	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2.2 J	2.2 J	2 J	2.3 J
BARIUM	NA	NA	4	NA	NA	41	39	40	40
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	4.3 J	5.4 J	7 J	7.3 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.7 J	1.7 J	1.9 J	2.4 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	33 J	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	150	140	140	150
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	860	850	830	850
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	720	710	690	700

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW42A MSA-SW42A-081516 20160815	MSA-SW42B MSA-SW42B-081516 20160815	MSA-SW42C MSA-SW42C-081516 20160815	MSA-SW42D MSA-SW42D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	2.5	3	1.4	--
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.34 J	0.4 J	0.41 J	0.28 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	4.3	5.4	2	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	--	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2 J	2.5 J	2.2 J	1.8 J
BARIUM	NA	NA	4	NA	NA	37	41	39	38
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	4.7 J	9.2 J	5.8 J	6.1 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.1 J	2.2 J	2.2 J	2 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	130	140	140	130
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	750	780	780	760
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	610	640	640	630

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW43A MSA-SW43A-081516 20160815	MSA-SW43B MSA-SW43B-081516 20160815	MSA-SW43C MSA-SW43C-081516 20160815	MSA-SW43D MSA-SW43D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	4.6	3.5	1.4	0.39 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	2.5	2	0.9 J	0.53 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.7	0.58	0.38 J	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	1.8 J	1.8 J	1.8 J	--
BARIUM	NA	NA	4	NA	NA	38	31	41	40
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	4.2 J	3.6 J	5.4 J	6.3 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.7 J	1.7 J	1.9 J	2 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	140	120	150	140
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	800	740	890	810
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	670	620	740	670

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
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Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW44A MSA-SW44A-081516 20160815	MSA-SW44B MSA-SW44B-081516 20160815	MSA-SW44C MSA-SW44C-081516 20160815	MSA-SW44D MSA-SW44D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	1.5	0.46 J	0.44 J	0.45 J
M+P-XYLENES	NA	NA	13	NA	NA	0.37 J	--	0.64 J	--
O-XYLENE	NA	NA	13	NA	NA	--	--	0.32 J	--
TOLUENE	NA	NA	2	15000	NA	0.59 J	--	1.1	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	0.96 J	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	1	0.5 J	0.41 J	0.49 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.38 J	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	1.8 J	2 J	1.9 J	1.9 J
BARIUM	NA	NA	4	NA	NA	43	45	42	42
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	4.1 J	6.1 J	6.3 J	6.9 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	--	--	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.7 J	2.2 J	2.4 J	2.1 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	140	150	140	150
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	860	920	860	870
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	720	770	720	730

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW45A MSA-SW45A-081516 20160815	MSA-SW45B MSA-SW45B-081516 20160815	MSA-SW45C MSA-SW45C-081516 20160815	MSA-SW45D MSA-SW45D-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	--	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	0.39 J	0.43 J	0.35 J	0.37 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	0.46 J	0.44 J
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	0.86 J	0.82 J
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.33 J	0.3 J	0.4 J	0.41 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	1.8 J	--	2 J	2.1 J
BARIUM	NA	NA	4	NA	NA	43	35	42	43
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3.9 J	3 J	5.4 J	6.9 J
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	--	--	--	--
MERCURY	1.4	0.77	NA [6]	NA	NA	--	0.22	0.13 J	--
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.4 J	1.7 J	1.7 J	2 J
SELENIUM	NA	5	NA [6]	4200	NA	--	--	--	--
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	150	140	140	150
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	880	790	870	880
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	730	660	730	730

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location Sample ID Sample Date	National Recommended Water Quality Criteria[1] Freshwater Acute	 Chronic	Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW46A MSA-SW46A-081516 20160815	MSA-SW47A MSA-SW47A-081516 20160815	MSA-SW48A MSA-SW48A-081516 20160815	MSA-SW49A MSA-SW49A-081516 20160815
Volatile organic compounds (µg/L)									
1,3-DICHLOROBENZENE	NA	NA	150	960	NA	--	--	0.19 J	--
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	0.87 J	0.27 J
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	3.2	4.1	18	15
M+P-XYLENES	NA	NA	13	NA	NA	--	--	1.6 J	--
O-XYLENE	NA	NA	13	NA	NA	--	--	0.41 J	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	2	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	5.1	5.6	7	11
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	1.5	1.9	16	7.5
Volatile organic compound tentatively identified compounds (µg/L)									
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)									
1,4-DIOXANE	NA	NA	NA	NA	NA	--	--	0.72 J	--
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	NA	NA	NA	NA
BARIUM	NA	NA	4	NA	NA	NA	NA	NA	NA
COBALT	NA	NA	23	NA	NA	NA	NA	NA	NA
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	NA	NA	NA	NA
LEAD	281 [7]	10.9 [7]	10.9 [7]	NA	NA	NA	NA	NA	NA
MERCURY	1.4	0.77	NA [6]	NA	NA	NA	NA	NA	NA
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	NA	NA	NA	NA
SELENIUM	NA	5	NA [6]	4200	NA	NA	NA	NA	NA
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	NA	NA	NA	NA
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
HARDNESS AS CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

1 National Recommended Water Quality Criteria, http://water.epa.gov/scitech/swguidance/standards/current/index.cfm; and Maryland Numerical Criteria for Toxic Substances in Surface Waters, Code of Maryland Regulations (COMAR) 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm

2 United State Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) Freshwater Screening Benchmarks

3 For carcinogens, criterion is for incremental cancer risk of $1x10^{-5}$

4 Site-specific swimming screening levels were developed for trichloroethene, *cis* -1,2-dichloroethene, and vinyl chloride only.

5 The BTAG screening benchmark for 1,2-dichloroethene (590 µg/L) is used as a surrogate screening level for cis-1,2-dichloroethene.

6 The BTAG screening benchmark is based on total metal concentration for this analyte; therefore, the dissolved metals result is not screened against the BTAG benchmark.

7 In accordance with USEPA (2002 and 2006), the option to use site-specific hardness was selected to adjust this criterion instead of the standard hardness concentration of 100 mg/L. As recommended by USEPA (2002), a hardness value of 400 mg/L is used for instances when the minimum measured site-specific hardness is greater than 400 mg/L (minimum hardness is 570 mg/L for August 2016 sampling).

Gray shading indicates a result that exceeds a screening criterion.

-- not detected

$CaCO_3$ - calcium carbonate

EL - Edwards Lane

J - estimated result

µg/L - micrograms per liter

mg/L - milligrams per liter

MSA - Martin State Airport

NA - not analyzed or not available

SW - surface water

Table 4-3

Surface Water Chemical Results for Primary Volatile Organic Compounds for August 2016, July 2016, and August 2015
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location ID	Trichloroethene concentrations (µg/L)			*cis* -1,2-Dichloroethene concentrations (µg/L)			Vinyl chloride concentrations (µg/L)		
	August 15, 2016	July 12, 2016	August 10, 2015	August 15, 2016	July 12, 2016	August 10, 2015	August 15, 2016	July 12, 2016	August 10, 2015
Average-Detections	1.86	1.17	0.55	3.27	1.45	0.47	3.77	1.27	0.48
Average-All Samples[(1)]	1.82	1.01	0.45	2.55	1.03	0.35	1.63	0.48	0.18
Maximum Concentration	11	4.7	1	18	9.6	1.3	16	7.5	0.66
No. of Detections/Samples	43/44	38/44	34/44	33/44	30/44	29/44	18/44	13/44	4/44
EL-SW01A	0.25 J	--	--	--	--	--	--	--	--
EL-SW01B	0.32 J	--	--	--	--	--	--	--	--
EL-SW01C	0.26 J	0.22 J	0.41 J	--	--	--	--	--	--
EL-SW01D	0.33 J	--	0.46 J	0.26 J	--	--	--	--	--
MSA-SW37A	0.24 J	--	0.69 J	--	--	0.37 J	--	--	--
MSA-SW37B	0.3 J	0.32 J	0.54 J	--	--	0.35 J	--	--	--
MSA-SW37C	0.25 J	0.28 J	0.52 J	--	--	0.3 J	--	--	--
MSA-SW37D	0.25 J	0.41 J	0.47 J	--	--	0.27 J	--	--	--
MSA-SW38A	6.3	1.6	1	10	9.6	0.95 J	7.8	7.5	0.5
MSA-SW38B	5.5	0.79 J	0.67 J	7.4	1.2	0.53 J	4.4	0.79	--
MSA-SW38C	1.3	1	0.35 J	0.99 J	0.42 J	--	0.43 J	--	--
MSA-SW38D	0.72 J	0.73 J	0.45 J	0.51 J	0.27 J	0.3 J	--	--	--
MSA-SW39A	0.24 J	--	--	0.35 J	--	--	--	--	--
MSA-SW39B	0.23 J	--	--	0.26 J	--	--	--	--	--
MSA-SW39C	0.23 J	--	--	0.26 J	--	--	--	--	--
MSA-SW39D	--	0.39 J	--	--	--	--	--	--	--
MSA-SW40A	3.9	3	0.63 J	3.1	1.2	0.39 J	1.5	0.34 J	--
MSA-SW40B	4.3	2.2	0.63 J	2.2	0.87 J	0.56 J	0.97	--	--
MSA-SW40C	0.72 J	3.7	0.47 J	0.42 J	1	0.33 J	--	--	--
MSA-SW40D	0.37 J	1.6	0.55 J	--	0.54 J	0.26 J	--	--	--
MSA-SW41A	6.9	1	0.83 J	12	0.96 J	0.95 J	6.8	0.67	0.38 J
MSA-SW41B	6.1	0.88 J	0.39 J	11	0.85 J	0.33 J	5.3	0.57	--
MSA-SW41C	0.54 J	0.86 J	0.5 J	0.44 J	0.59 J	0.3 J	--	0.29 J	--

Table 4-3

Surface Water Chemical Results for Primary Volatile Organic Compounds for August 2016, July 2016, and August 2015
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Location ID	Trichloroethene concentrations (µg/L)			*cis* -1,2-Dichloroethene concentrations (µg/L)			Vinyl chloride concentrations (µg/L)		
	August 15, 2016	July 12, 2016	August 10, 2015	August 15, 2016	July 12, 2016	August 10, 2015	August 15, 2016	July 12, 2016	August 10, 2015
MSA-SW41D	0.47 J	0.75 J	0.5 J	0.34 J	0.44 J	0.29 J	--	--	--
MSA-SW42A	0.34 J	0.32 J	0.6 J	2.5	0.52 J	0.36 J	4.3	0.62	--
MSA-SW42B	0.4 J	0.44 J	0.51 J	3	0.49 J	0.35 J	5.4	0.37 J	--
MSA-SW42C	0.41 J	0.55 J	0.54 J	1.4	--	0.34 J	2	--	--
MSA-SW42D	0.28 J	1.5	0.41 J	--	0.48 J	0.26 J	--	--	--
MSA-SW43A	2.5	4.7	0.68 J	4.6	6.4	0.73 J	0.7	0.82	--
MSA-SW43B	2	4.5	0.52 J	3.5	6.1	0.48 J	0.58	0.7	--
MSA-SW43C	0.9 J	0.69 J	0.31 J	1.4	0.39 J	0.26 J	0.38 J	--	--
MSA-SW43D	0.53 J	0.63 J	0.43 J	0.39 J	0.29 J	0.27 J	--	--	--
MSA-SW44A	1	0.53 J	0.38 J	1.5	0.32 J	0.37 J	0.38 J	--	--
MSA-SW44B	0.5 J	0.4 J	--	0.46 J	0.27 J	--	--	--	--
MSA-SW44C	0.41 J	0.45 J	0.32 J	0.44 J	--	--	--	--	--
MSA-SW44D	0.49 J	0.46 J	0.35 J	0.45 J	0.29 J	--	--	--	--
MSA-SW45A	0.33 J	0.71 J	0.36 J	0.39 J	0.79 J	0.27 J	--	--	--
MSA-SW-45B	0.3 J	0.48 J	--	0.43 J	0.34 J	--	--	--	--
MSA-SW45C	0.4 J	0.47 J	--	0.35 J	0.27 J	--	--	--	--
MSA-SW45D	0.41 J	0.39 J	--	0.37 J	0.26 J	--	--	--	--
MSA-SW46A	5.1	0.86 J	0.66 J	3.2	0.48 J	0.45 J	1.5	--	--
MSA-SW47A	5.6	0.95 J	0.76 J	4.1	0.86 J	0.59 J	1.9	0.39 J	--
MSA-SW48A	7	1.5	0.94 J	18	2.2	1.3	16	1.5	0.66
MSA-SW49A	11	3.2	0.9 J	15	4.7	1.1	7.5	2	0.36 J

1 For non-detects, 1/2 sample quantitation limit was used as a proxy concentration, and 1/2 the detection limit was used for B qualified data.
-- not detected
EL - Edwards Lane
J - estimated value
µg/L - micrograms per liter
MSA - Martin State Airport
SW - surface water



FIGURE 4-1

CONCENTRATIONS OF TRICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2016 FROG MORTAR CREEK

LEGEND

- CONCENTRATION EXCEEDS A SCREENING LEVEL
- SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- OUTLINE OF FORMER COVE
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL - DUMP ROAD AREA
- POND

(1.4) = TRICHLOROETHENE CONCENTRATION
J = ESTIMATED VALUE
- - = NOT DETECTED
CONCENTRATION IN MICROGRAMS PER LITER (UG/L)

SCREENING LEVELS FOR TRICHLOROETHENE
ECOLOGICAL SURFACE WATER: 21 UG/L
HUMAN HEALTH
(CONSUMPTION OF ORGANISM): 300 UG/L
SITE SPECIFIC SWIMMING: 10 UG/L

SAMPLES COLLECTED AUGUST 15, 2016.
2014 AERIAL PHOTOGRAPH PROVIDED BY U.S. GEOLOGICAL SURVEY.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/03/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_tce_results_aug2016.mxd)
10/03/16 -- JEE



FIGURE 4-2

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2016 FROG MORTAR CREEK

LEGEND

- SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- OUTLINE OF FORMER COVE
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL - DUMP ROAD AREA
- POND

(0.27) = CIS-1,2-DICHLOROETHENE CONCENTRATION
J = ESTIMATED VALUE
- - = NOT DETECTED
CONCENTRATION IN MICROGRAMS PER LITER (UG/L)

SCREENING LEVELS FOR CIS-1,2-DICHLOROETHENE
ECOLOGICAL SURFACE WATER: 590 UG/L
HUMAN HEALTH
(CONSUMPTION OF ORGANISM): NONE
SITE SPECIFIC SWIMMING: 300 UG/L

SAMPLES COLLECTED AUGUST 15, 2016.
2014 AERIAL PHOTOGRAPH PROVIDED BY U.S. GEOLOGICAL SURVEY.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/03/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_cis12dce_results_aug2016.mxd)
10/03/16 -- JEE



FIGURE 4-3

CONCENTRATIONS OF VINYL CHLORIDE IN SURFACE WATER SAMPLES, AUGUST 2016 FROG MORTAR CREEK

LEGEND

- SURFACE WATER SAMPLE LOCATION
- CONCENTRATION EXCEEDS A SCREENING LEVEL
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- OUTLINE OF FORMER COVE
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL - DUMP ROAD AREA
- POND

(0.57) = VINYL CHLORIDE CONCENTRATION
J = ESTIMATED VALUE
- - = NOT DETECTED
CONCENTRATION IN MICROGRAMS PER LITER (UG/L)

SCREENING LEVELS FOR VINYL CHLORIDE
ECOLOGICAL SURFACE WATER: 930 UG/L
HUMAN HEALTH
(CONSUMPTION OF ORGANISM): 24 UG/L
SITE SPECIFIC SWIMMING: 0.7 UG/L

SAMPLES COLLECTED AUGUST 15, 2016.
2014 AERIAL PHOTOGRPAH PROVIDED BY U.S. GEOLOGICAL SURVEY.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/03/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_VC_results_aug2016.mxd)
10/03/16 -- JEE

Section 5
Summary

Lockheed Martin Corporation's (Lockheed Martin's) August 2016 Frog Mortar Creek surface-water investigation results are summarized below:

- Surface water samples were collected from Frog Mortar Creek on August 15, 2016 and chemically analyzed to assess concentrations of chemical constituents detected in Frog Mortar Creek, and to evaluate creek surface-water quality near the Dump Road Area (DRA). Each sample was collected at approximately one foot below the water surface.

- Samples were collected along each of nine transects spaced approximately 350 feet apart (for 36 samples) along the western shoreline of Frog Mortar Creek, and from one transect along the eastern shoreline. Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), one was collected approximately 100 feet from the shoreline ("C" sample), and one was collected approximately 200 feet from the shoreline ("D" sample). In addition to the samples collected along transects, four single-point shoreline samples were collected, including SW46A (between transects SW42 and SW40), SW47A (between transects SW40 and SW38), SW48A (between transects SW38 and SW41), and SW49A (between transects SW41 and SW43).

- Frog Mortar Creek samples along the western shoreline were analyzed for volatile organic compounds (VOCs), filtered metals, hexavalent chromium, and hardness. Samples SW46A–SW49A, and those collected along the eastern shoreline, were analyzed for volatile organic compounds. Additionally, eight near-shore "A" samples, including SW38A, SW40A-SW42A, and SW46A–SW49A, were analyzed for 1,4-dioxane to obtain 1,4-dioxane data in a warm-water period.

- The data were validated in accordance with the *United States Environmental Protection Agency (USEPA) Region III Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994) and the specific requirements of the analytical methods used. Sampling results were screened against United States Environmental Protection Agency Region 3 Biological Technical Advisory Group (BTAG) ecological screening-benchmarks for freshwater; United States Environmental Protection Agency national recommended water quality criteria (NRWQC) for acute and chronic aquatic-organism exposures and for human health aquatic-organism-consumption; Maryland ambient water quality criteria (AWQC) for acute and chronic aquatic-organism exposures and for human health aquatic-organism-consumption; and site-specific screening levels developed to evaluate risks to recreational swimmers from exposure to

the three most frequently detected volatile organic compounds in surface water: trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC).

- Volatile organic compounds (primarily trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride), 1,4-dioxane, and metals were detected in the August 2016 surface water samples.

- Average volatile organic compound concentrations in the August 2016 surface water samples are higher than those detected in the previous sampling round (July 2016), and are three to seven times higher than concentrations detected a year ago (August 2015). Maximum concentrations of trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride are two times higher than last month, and 10 times higher than a year ago.

- Volatile organic compound concentrations in all August 2016 surface water samples were less than human health consumption-of-organism and ecological screening-levels. However, one TCE concentration and 13 vinyl chloride concentrations (predominantly in near-shore samples) exceeded the swimming criteria. This is an increase from last month (July 2016), when only vinyl chloride exceeded the swimming criterion at five locations. This is also an increase from last year (in August 2015), when no volatile organic compound concentrations exceeded the criteria.

- The highest trichloroethene concentrations were at sampling locations SW49A (11 micrograms per liter [µg/L]) and SW48A (7.0 µg/L), south of and near the center of the main portion of the Dump Road Area, respectively. The highest concentrations of both *cis*-1,2-dichloroethene (18 µg/L) and vinyl chloride (16 µg/L) were detected at location SW48A, near the center of the Dump Road Area.

- The maximum trichloroethene concentration detected in August 2016 (11 µg/L) was more than two times higher than the maximum trichloroethene concentration (4.7 µg/L) for July 2016, and 11 times higher than the maximum concentration for August 2015 (1 µg/L).

- The maximum concentrations of *cis*-1,2-dichloroethene and vinyl chloride in August 2016 (18 µg/L and 16 µg/L, respectively) are higher than maxima last month in July 2016 (9.6 µg/L and 7.5 µg/L, respectively), and higher than in August of last year (1.3 µg/L and 0.66 µg/L, respectively).

- Trichloroethene was detected at trace concentrations (0.25–0.33 µg/L) in the four samples collected along the eastern-shoreline (SW01A–SW01D), and *cis*-1,2-dichloroethene was detected in one sample at a low concentration. Vinyl chloride was not detected in any of the eastern-shoreline samples. These concentrations are consistent with previous sampling results indicating that volatile organic compound concentrations in this area of Frog Mortar Creek are below the swimming criteria for these constituents.

- [Specifically address 1,4 dioxane.]

- Dissolved barium exceeds its screening level in all 36 samples collected in August 2016. Barium is ubiquitous in creek samples; the August 2016 concentrations (30–45 µg/L) are slightly lower than those detected in July 2016 (40–47 µg/L), but higher than those detected a year ago (14–15 µg/L in August 2015).

- Arsenic (1.8–2.9 µg/L) was detected in all but two samples this round, and all detected concentrations exceeded the lowest arsenic screening level (1.4 µg/L). Arsenic in August 2016 is slightly lower than last month's concentrations (2.5–2.9 µg/L in July 2016), but is slightly higher than last year's concentrations (2–2.2 µg/L in August 2015). However, the August 2016 arsenic concentrations are within the range of background concentrations (2.2–3.9 µg/L) established during Lockheed Martin's larger-scale 2007–2008 Frog Mortar Creek investigation.

- Dissolved hexavalent chromium was not detected in any August 2016 Frog Mortar Creek samples. These results are consistent with previous sampling results indicating that hexavalent chromium concentrations are below the most protective (i.e., lowest) screening criterion used for Frog Mortar Creek.

- Lockheed Martin will again sample surface water at the same Frog Mortar Creek sampling locations in September and December 2016.

Section 6
References

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APPENDIX A—FIELD MEASUREMENTS FOR WATER QUALITY AND SURFACE WATER SAMPLE LOG SHEETS

Sample ID		Date	Time	pH	Specific conductance (S.C.)	Temperature (Temp.)	Turbidity	Dissolved oxygen (DO)	Salinity	Oxidation-reduction potential (ORP)	Water Depth
Location	Date ID	mo/day/year	24-hour units	Standard unit (S.U.)	MilliSiemens per centimeter (mS/cm)	Degrees Celsius (^{o}C)	Nephelometric turbidity unit (NTU)	Milligrams per liter (mg/L)	Parts per thousand (ppt)	MilliVolts (mV)	Meters (m)
EL-SW01A	-81516	8/15/2016	856	6.86	7.4	29.92	2.13	4.24	4.0	249	0.3
EL-SW01B	-81516	8/15/2016	902	7.18	7.3	30.27	1.76	6.36	4.0	202	0.8
EL-SW01C	-81516	8/15/2016	907	7.55	7.6	30.80	2.94	4.63	4.2	198	1.1
EL-SW01D	-81516	8/15/2016	911	7.53	7.6	30.76	2.88	3.94	4.2	198	1.6
MSA-SW37A	-81516	8/15/2016	1303	9.54	6.7	34.51	4.24	6.35	3.6	102	0.4
MSA-SW37B	-81516	8/15/2016	1307	9.55	7.1	33.46	2.79	6.79	3.9	114	0.8
MSA-SW37C	-81516	8/15/2016	1311	9.37	6.7	32.97	5.75	7.12	3.6	108	1.4
MSA-SW37D	-81516	8/15/2016	1321	8.23	6.9	32.57	4.21	5.05	3.8	148	1.7
MSA-SW38A	-81516	8/15/2016	1131	7.73	7.3	32.50	2.54	3.87	4.0	125	0.7
MSA-SW38B	-81516	8/15/2016	1140	8.03	7.3	32.14	4.38	3.25	4.0	121	1.2
MSA-SW38C	-81516	8/15/2016	1148	9.42	7.5	34.76	4.47	5.07	4.1	106	1.3
MSA-SW38D	-81516	8/15/2016	1153	8.16	7.0	31.85	3.59	4.47	3.9	142	1.7
MSA-SW39A	-81516	8/15/2016	924	7.81	7.1	30.95	8.27	4.57	3.9	163	0.8
MSA-SW39B	-81516	8/15/2016	930	7.91	7.3	30.77	2.54	4.18	4.0	171	1.0
MSA-SW39C	-81516	8/15/2016	935	7.80	7.6	30.93	2.85	3.85	4.2	175	1.2
MSA-SW39D	-81516	8/15/2016	943	8.85	7.6	31.45	1.41	5.66	4.2	151	1.7
MSA-SW40A	-81516	8/15/2016	1209	8.44	7.3	32.79	4.55	4.73	4.0	105	0.4
MSA-SW40B	-81516	8/15/2016	1215	8.44	7.1	32.26	3.62	5.03	3.8	120	0.7
MSA-SW40C	-81516	8/15/2016	1218	9.11	6.9	32.88	3.54	5.46	3.8	116	1.3
MSA-SW40D	-81516	8/15/2016	1223	8.08	7.0	31.99	3.82	4.42	3.8	135	1.7
MSA-SW41A	-81516	8/15/2016	1104	7.32	7.4	31.62	2.17	3.93	4.0	149	0.4
MSA-SW41B	-81516	8/15/2016	1108	7.24	7.4	31.72	1.73	3.82	4.0	155	0.7
MSA-SW41C	-81516	8/15/2016	1111	8.23	7.1	31.68	3.79	4.44	3.9	150	1.3
MSA-SW41D	-81516	8/15/2016	1115	7.96	7.0	31.56	3.79	4.08	3.8	167	1.7
MSA-SW42A	-81516	8/15/2016	1240	8.88	6.1	32.83	8.19	5.95	3.4	115	0.4
MSA-SW42B	-81516	8/15/2016	1244	8.47	6.7	32.60	3.78	4.88	3.7	110	0.6
MSA-SW42C	-81516	8/15/2016	1250	8.32	6.6	32.54	3.23	5.39	3.7	131	0.7
MSA-SW42D	-81516	8/15/2016	1253	9.20	6.6	33.07	3.81	5.59	3.6	126	1.6
MSA-SW43A	-81516	8/15/2016	1030	7.84	7.4	31.36	2.00	4.58	4.1	162	0.5
MSA-SW43B	-81516	8/15/2016	1035	8.81	7.2	35.10	2.05	5.02	4.0	154	1.2
MSA-SW43C	-81516	8/15/2016	1041	8.90	7.6	31.78	2.98	5.60	4.2	161	1.6
MSA-SW43D	-81516	8/15/2016	1048	8.08	7.3	31.37	3.42	4.73	4.0	172	1.7
MSA-SW44A	-81516	8/15/2016	1010	7.31	7.5	31.11	2.95	3.38	4.1	190	0.4
MSA-SW44B	-81516	8/15/2016	1015	7.41	7.6	31.08	3.62	3.61	4.2	188	0.9
MSA-SW44C	-81516	8/15/2016	1018	7.75	7.5	31.08	3.52	3.89	4.1	189	1.5
MSA-SW44D	-81516	8/15/2016	1022	7.77	7.5	31.12	3.43	3.91	4.1	190	1.7
MSA-SW45A	-81516	8/15/2016	949	7.61	7.6	30.75	4.16	4.02	4.2	177	0.4
MSA-SW45B	-81516	8/15/2016	953	7.55	7.5	30.49	3.98	3.67	4.1	178	1.0
MSA-SW45C	-81516	8/15/2016	1000	7.68	7.6	30.91	3.47	3.90	4.2	185	1.7
MSA-SW45D	-81516	8/15/2016	1003	7.70	7.6	30.97	3.72	4.02	4.2	187	1.8
MSA-SW46A	-81516	8/15/2016	1231	8.42	7.2	33.05	3.36	4.65	3.9	141	0.3
MSA-SW47A	-81516	8/15/2016	1202	8.17	7.3	32.97	4.08	4.37	4.0	60	0.4
MSA-SW48A	-81516	8/15/2016	1122	7.49	7.3	31.67	3.27	4.39	4.0	136	0.5
MSA-SW49A	-81516	8/15/2016	1055	7.66	7.4	31.43	2.07	4.69	4.0	139	0.5

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: EL-SW01A -81516
Sample Location: EL-SW01A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	856	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**6.86**	**7.35**	**29.92**	**2.13**	**4.24**	**4**	**249**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes

OBSERVATIONS / NOTES:

Water depth 0.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: EL-SW01B -81516
Sample Location: EL-SW01B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	902								
Depth:	1 ft below water		**7.18**	**7.3**	**30.27**	**1.76**	**6.36**	**4**	**202**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes

OBSERVATIONS / NOTES:

Water depth 0.8 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: EL-SW01C -81516
Sample Location: EL-SW01C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	907	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		7.55	7.6	30.80	2.94	4.63	4.2	198
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes

OBSERVATIONS / NOTES:

Water depth 1.1 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: EL-SW01D -81516
Sample Location: EL-SW01D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	911								
Depth:	1 ft below water		**7.53**	**7.6**	**30.76**	**2.88**	**3.94**	**4.2**	**198**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes

OBSERVATIONS / NOTES:

Water depth 1.6 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW37A -81516
Sample Location: MSA-SW37A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1303	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**9.54**	**6.65**	**34.51**	**4.24**	**6.35**	**3.6**	**102**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW37B -81516
Sample Location: MSA-SW37B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1307	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**9.55**	**7.1**	**33.46**	**2.79**	**6.79**	**3.9**	**114**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.8 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW37C -81516
Sample Location: MSA-SW37C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1311	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**9.37**	**6.7**	**32.97**	**5.75**	**7.12**	**3.6**	**108**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW37D -81516
Sample Location: MSA-SW37D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1321	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.23**	**6.9**	**32.57**	**4.21**	**5.05**	**3.8**	**148**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW38A -81516
Sample Location: MSA-SW38A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1131	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		7.73	7.3	32.5	2.54	3.87	4	125
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW38B -81516
Sample Location: MSA-SW38B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1140	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.03**	**7.3**	**32.14**	**4.38**	**3.25**	**4**	**121**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.2 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW38C -81516
Sample Location: MSA-SW38C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1148	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**9.42**	**7.5**	**34.76**	**4.47**	**5.07**	**4.1**	**106**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW38D -81516
Sample Location: MSA-SW38D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1153	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.16**	**7.00**	**31.85**	**3.59**	**4.47**	**3.9**	**142**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW39A -81516
Sample Location: MSA-SW39A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	924	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.81**	**7.10**	**30.95**	**8.27**	**4.57**	**3.9**	**163**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.8 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW39B -81516
Sample Location: MSA-SW39B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	930								
Depth:	1 ft below water		**7.91**	**7.30**	**30.77**	**2.54**	**4.18**	**4**	**171**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW39C -81516
Sample Location: MSA-SW39C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	935	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.8**	**7.60**	**30.93**	**2.85**	**3.85**	**4.2**	**175**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.2 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW39D -81516
Sample Location: MSA-SW39D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	943	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.85**	**7.6**	**31.45**	**1.41**	**5.66**	**4.2**	**151**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW40A -81516
Sample Location: MSA-SW40A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1209	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.44**	**7.30**	**32.79**	**4.55**	**4.73**	**4.0**	**105**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW40B -81516
Sample Location: MSA-SW40B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1215	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.44**	**7.10**	**32.26**	**3.62**	**5.03**	**3.8**	**120**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW40C -81516
Sample Location: MSA-SW40C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1218	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**9.11**	**6.90**	**32.88**	**3.54**	**5.46**	**3.8**	**116**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW40D -81516
Sample Location: MSA-SW40D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1223	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.08**	**7.00**	**31.99**	**3.82**	**4.42**	**3.8**	**135**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW41A -81516
Sample Location: MSA-SW41A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1104	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.32**	**7.40**	**31.62**	**2.17**	**3.93**	**4.0**	**149**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW41B -81516
Sample Location: MSA-SW41B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1108	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		7.24	7.40	31.72	1.73	3.82	4.0	155
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW41C -81516
Sample Location: MSA-SW41C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1111	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.23**	**7.10**	**31.68**	**3.79**	**4.44**	**3.9**	**150**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW41D -81516
Sample Location: MSA-SW41D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1115								
Depth:	1 ft below water		**7.96**	**7.00**	**31.56**	**3.79**	**4.08**	**3.8**	**167**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW42A -81516
Sample Location: MSA-SW42A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1240	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.88**	**6.10**	**32.83**	**8.19**	**5.95**	**3.4**	**115**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW42B -81516
Sample Location: MSA-SW42B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1244	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.47**	**6.70**	**32.60**	**3.78**	**4.88**	**3.7**	**110**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.6 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW42C -81516
Sample Location: MSA-SW42C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1250	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.32**	**6.60**	**32.54**	**3.23**	**5.39**	**3.7**	**131**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW42D -81516
Sample Location: MSA-SW42D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1253	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**9.20**	**6.60**	**33.07**	**3.81**	**5.59**	**3.6**	**126**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.6 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW43A -81516
Sample Location: MSA-SW43A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1030	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.84**	**7.40**	**31.36**	**2.00**	**4.58**	**4.1**	**162**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW43B -81516
Sample Location: MSA-SW43B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1035	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.81**	**7.20**	**35.10**	**2.05**	**5.02**	**4.0**	**154**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.2 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW43C -81516
Sample Location: MSA-SW43C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1041	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.90**	**7.60**	**31.78**	**2.98**	**5.60**	**4.2**	**161**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.6 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW43D -81516
Sample Location: MSA-SW43D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1048	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.08**	**7.30**	**31.37**	**3.42**	**4.73**	**4.0**	**172**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW44A -81516
Sample Location: MSA-SW44A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1010	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.31**	**7.50**	**31.11**	**2.95**	**3.38**	**4.1**	**190**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW44B -81516
Sample Location: MSA-SW44B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1015	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.41**	**7.60**	**31.08**	**3.62**	**3.61**	**4.2**	**188**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.9 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW44C -81516
Sample Location: MSA-SW44C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1018	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.75**	**7.50**	**31.08**	**3.52**	**3.89**	**4.1**	**189**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW44D -81516
Sample Location: MSA-SW44D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1022	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		7.77	7.50	31.12	3.43	3.91	4.1	190
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW45A -81516
Sample Location: MSA-SW45A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	949								
Depth:	1 ft below water		**7.61**	**7.60**	**30.75**	**4.16**	**4.02**	**4.2**	**177**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW45B -81516
Sample Location: MSA-SW45B
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	953	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.55**	**7.50**	**30.49**	**3.98**	**3.67**	**4.1**	**178**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW45C -81516
Sample Location: MSA-SW45C
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1000	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.68**	**7.60**	**30.91**	**3.47**	**3.90**	**4.2**	**185**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW45D -81516
Sample Location: MSA-SW45D
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1003	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.70**	**7.60**	**30.97**	**3.72**	**4.02**	**4.2**	**187**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic	Yes
Dissolved Hexavalent chromium	4° C	1 - 250 mL plastic	Yes

OBSERVATIONS / NOTES:

Water depth 1.8 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW46A -81516
Sample Location: MSA-SW46A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1231								
Depth:	1 ft below water		**8.42**	**7.20**	**33.05**	**3.36**	**4.65**	**3.9**	**141**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW47A -81516
Sample Location: MSA-SW47A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1202	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**8.17**	**7.30**	**32.97**	**4.08**	**4.37**	**4.0**	**60**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW48A -81516
Sample Location: MSA-SW48A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1122	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.49**	**7.30**	**31.67**	**3.27**	**4.39**	**4.0**	**136**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC07804

[] Stream
[] Spring
[] Pond
[] Lake
[X] Other: Tidal creek - freshwater
[] QA Sample Type:

Sample ID No.: MSA-SW49A -81516
Sample Location: MSA-SW49A
Sampled By: J. Mullis
C.O.C. No.:

Type of Sample:
[x] Low Concentration
[] High Concentration

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/15/2016								
Time:	1055	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water		**7.66**	**7.40**	**31.43**	**2.07**	**4.69**	**4.0**	**139**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCL pH<2	3 - 40 mL glass vials	Yes
1,4-dioxane	4° C	2-1L ambers	Yes

OBSERVATIONS / NOTES:

Water depth 0.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX B—DATA-VALIDATION REPORTS

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **OCTOBER 6, 2016**

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

SUBJECT: **ORGANIC & INORGANIC DATA VALIDATION – VOC/1,4-DIOXANE/ DISSOLVED METALS/HARDNESS**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
FROG MORTAR CREEK SURFACE WATER SAMPLING
SDG 240-68359-1

SAMPLES: 45/Aqueous/VOC

EL-SW01A-081516	EL-SW01B-081516	EL-SW01C-081516
EL-SW01D-081516	MSA-SW37A-081516	MSA-SW37B-081516
MSA-SW37C-081516	MSA-SW37D-081516	MSA-SW38A-081516
MSA-SW38B-081516	MSA-SW38C-081516	MSA-SW38D-081516
MSA-SW39A-081516	MSA-SW39B-081516	MSA-SW39C-081516
MSA-SW39D-081516	MSA-SW40A-081516	MSA-SW40B-081516
MSA-SW40C-081516	MSA-SW40D-081516	MSA-SW41A-081516
MSA-SW41B-081516	MSA-SW41C-081516	MSA-SW41D-081516
MSA-SW42A-081516	MSA-SW42B-081516	MSA-SW42C-081516
MSA-SW42D-081516	MSA-SW43A-081516	MSA-SW43B-081516
MSA-SW43C-081516	MSA-SW43D-081516	MSA-SW44A-081516
MSA-SW44B-081516	MSA-SW44C-081516	MSA-SW44D-081516
MSA-SW45A-081516	MSA-SW45B-081516	MSA-SW45C-081516
MSA-SW45D-081516	MSA-SW46A-081516	MSA-SW47A-081516
MSA-SW48A-081516	MSA-SW49A-081516	TB-081516

8/Aqueous/1,4-Dioxane

MSA-SW38A-081516	MSA-SW40A-081516	MSA-SW41A-081516
MSA-SW42A-081516	MSA-SW46A-081516	MSA-SW47A-081516
MSA-SW48A-081516	MSA-SW49A-081516	

36/Aqueous/Dissolved Metals/Hardness

MSA-SW37A-081516	MSA-SW37B-081516	MSA-SW37C-081516
MSA-SW37D-081516	MSA-SW38A-081516	MSA-SW38B-081516
MSA-SW38C-081516	MSA-SW38D-081516	MSA-SW39A-081516
MSA-SW39B-081516	MSA-SW39C-081516	MSA-SW39D-081516
MSA-SW40A-081516	MSA-SW40B-081516	MSA-SW40C-081516
MSA-SW40D-081516	MSA-SW41A-081516	MSA-SW41B-081516
MSA-SW41C-081516	MSA-SW41D-081516	MSA-SW42A-081516
MSA-SW42B-081516	MSA-SW42C-081516	MSA-SW42D-081516
MSA-SW43A-081516	MSA-SW43B-081516	MSA-SW43C-081516
MSA-SW43D-081516	MSA-SW44A-081516	MSA-SW44B-081516
MSA-SW44C-081516	MSA-SW44D-081516	MSA-SW45A-081516
MSA-SW45B-081516	MSA-SW45C-081516	MSA-SW45D-081516

Overview

The sample set for LMC-MSA Frog Mortar Creek, SDG 240-68359-1 consisted of forty-four (44) aqueous environmental samples and one (1) trip blank. All forty-five (45) aqueous samples were analyzed for Volatile Organic Compounds (VOC). Eight (8) aqueous samples were analyzed for 1,4-dioxane. Thirty-six

(36) aqueous samples were analyzed for dissolved metals and hardness. No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on August 15, 2016 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Methods 8260C, 8270D, 6020, 7470A, and Standard Methods SM 2340B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, ICP/MS tuning, initial/continuing calibrations, laboratory preparation/method/trip blanks, surrogate spike recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, internal standard results, ICP serial dilution results, chromatographic resolution, compound identification, tentatively identified compounds, compound/analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- As stated in the laboratory case narrative, 2-chloroethyl vinyl ether cannot be reliably recovered in an acid preserved samples. All samples in this SDG were acid preserved, therefore, the non-detected results reported for 2-chloroethyl vinyl ether were qualified as rejected, (UR).

Minor

- The VOC continuing calibration performed on instrument A3UX16 on 08/17/16 @ 16:58 had Percent Differences (%Ds) for dichlorodifluoromethane, vinyl chloride, bromomethane, chloroethane, and trichlorofluoromethane which exceeded the 20% quality control limit. Samples MSA-SW37A-081516, MSA-SW37B-081516, MSA-SW37C-081516, MSA-SW37D-081516, MSA-SW38A-081516, MSA-SW38B-081516, MSA-SW38C-081516, MSA-SW38D-081516, MSA-SW39A-081516, MSA-SW39B-081516, MSA-SW39C-081516, MSA-SW39D-081516, MSA-SW40A-081516, MSA-SW40B-081516, MSA-SW40C-081516, MSA-SW40D-081516, MSA-SW41A-081516, MSA-SW41B-081516, MSA-SW41C-081516, and MSA-SW41D-081516 were affected. No action was taken for vinyl chloride in samples MSA-SW38A-081516, MSA-SW38B-081516, MSA-SW40A-081516, MSA-SW40B-081516, MSA-SW41A-081516, and MSA-SW41B-081516 because this compound was reported from a separate analysis for these samples. The detected and non-detected results reported for these compounds in the affected samples were qualified as estimated, (J) and (UJ), respectively.

- The continuing calibration performed on instrument A3UX16 on 08/23/16 @ 17:28 had %Ds for bromomethane, chloroethane, tert-butyl ether, and 1,2,3-trichlorobenzene which exceeded the 20% quality control limit. Samples EL-SW01A-081516, EL-SW01B-081516, EL-SW01C-081516, MSA-SW42A-081516, MSA-SW42B-081516, MSA-SW42C-081516, MSA-SW42D-081516, MSA-SW43A-081516, MSA-SW43B-081516, MSA-SW43C-081516, MSA-SW43D-081516, MSA-SW44A-081516, MSA-SW44B-081516, MSA-SW44C-081516, MSA-SW44D-081516, MSA-SW45A-081516, MSA-SW45B-081516, MSA-SW45C-081516, and MSA-SW45D-081516 were affected. The non-detected results reported for these compounds in the affected samples were qualified as estimated, (UJ).

- The continuing calibration performed on instrument A3UX17 on 08/25/16 @ 10:31 had %Ds for bromomethane, trichlorofluoromethane, carbon tetrachloride, dibromochloromethane, bromoform, and 1,2,3-trichlorobenzene and a Percent Drift (%Drift) for hexachlorobutadiene which exceeded the 20% quality control limit. Samples MSA-SW46A-081516, MSA-SW47A-081516, MSA-SW48A-081516, MSA-SW49A-081516, and TB-081516 were affected. The non-detected results reported these compounds in the affected samples were qualified as estimated, (UJ).

- The continuing calibration performed on instrument A3UX17 on 08/26/16 @ 10:42 had %Ds for chloromethane, bromomethane, chloroethane, trichlorofluoromethane, 1,1,1-trichloroethane, carbon tetrachloride, dibromochloromethane, bromoform, naphthalene, and 1,2,4-trichlorobenzene which exceeded the 20% quality control limit. The non-detected results reported these compounds in the affected sample, EL-SW01D-081516, were qualified as estimated, (UJ).

- The following compound was detected in the laboratory method blanks at the following maximum concentrations:

Compound/Parameter	Maximum Concentration (µg/L)	Action Level (µg/L)
Acetone (1)	1.8	18
Acetone (2)	1.29	12.9

(1) - Maximum concentration detected in the laboratory method blank, MB 240-243081/6, affecting samples associated with preparation batch #240-243081.
(2) - Maximum concentration detected in the laboratory method blank, MB 240-243935/7, affecting samples associated with preparation batch #240-243935.

An action level of 10X was used for the common laboratory contaminant, acetone, to evaluate for blank contamination. The detected results reported for acetone in the affected samples below the established action levels were qualified as non-detected, (U).

- The following analytes were detected in the laboratory preparation and/or method blanks at the following maximum concentrations:

Analyte	Maximum Concentration (µg/L)	Reporting Limit (RL) > or <
Antimony (1)	0.320	<RL
Beryllium (1)	0.154	<RL
Molybdenum (1)	0.475	<RL
Tungsten (1)	0.913	<RL
Antimony (2)	0.353	<RL
Beryllium (2)	0.196	<RL
Cadmium (2)	0.083	<RL
Cobalt (2)	0.060	<RL
Molybdenum (2)	2.38	<RL
Selenium (2)	0.581	<RL
Thallium (2)	0.103	<RL
Tungsten (2)	1.13	<RL
Beryllium (3)	0.182	<RL
Chromium (4)	2.99	<RL

(1) - Maximum concentration detected in the initial/continuing calibration blanks from analytical batch #240-243331 affecting samples associated with this batch.

(2) - Maximum concentration detected in the initial/continuing calibration blanks from analytical batch #240-243587 affecting samples associated with this batch.
(3) - Maximum concentration detected in the initial/continuing calibration blanks from analytical batch # 240-243656 affecting samples associated with this batch.
(4) - Maximum concentration detected in the laboratory preparation blank, MB 240-242972/1-A, affecting samples associated with preparation batch #240-242972.

Detected results reported for analytes below the RL were qualified as non-detected, (U). No action was taken for the chromium result reported above the RL because chromium was not detected in the affected samples.

- The mercury Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses had a Percent Recovery (%R) above the upper quality control limit. Samples associated with preparation batch #240-242964 were affected. The detected results reported for mercury in the affected samples were qualified as estimated, (J).

- A Tentatively Identified Compound (TIC) search was performed for the compound chlorodifluoromethane for thirty-six of the samples. The laboratory did not detect this compound in the samples in this SDG. The laboratory assigned a Reporting Limit (RL) of 1 µg/L. Because the GC/MS was not calibrated for this compound, the RL is not considered precise. The non-detected results reported for chlorodifluoromethane were qualified as estimated, (UJ).

- TICs were detected in samples MSA-SW38A-081516, MSA-SW39A-081516, and MSA-SW40A-081516. Because the VOC GC/MS instrument was not calibrated for these compounds, 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

As stated in the laboratory case narrative, sample MSA-SW39D-081516 was insufficiently preserved (pH = 5) for the VOC analysis. No action was necessary because this sample was analyzed within the 7 day holding time for unpreserved aqueous samples.

Chlorodifluoromethane TIC search and 1,1,2-trichloro-1,2,2-trifluoroethane were not reported in VOC samples EL-SW01A-081516, EL-SW01B-081516, EL-SW01C-081516, EL-SW01D-081516, MSA-SW46A-081516, MSA-SW47A-081516, MSA-SW48A-081516, and MSA-SW49A-081516.

The VOC Laboratory Control Sample (LCS) associated with preparation batch #240-243935 had a %R for chloroethane above the upper quality control limit. No action taken because this compound was not detected in the affected samples.

2-Chloroethyl vinyl ether was not recovered in the MS/MSD analyses of samples MSA-SW41D-081516 and MSA-SW49A-081516. No action taken in the parent samples because the non-detected results reported for this compound were rejected due to acid preservation.

The dissolved metals 6020 analysis were analyzed at a 5X dilution.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Continuing calibration %Ds exceeded 20%. Acetone and metals were detected in the laboratory preparation/method blanks. Some LCS %Rs were high. Non-detected chlorodifluoromethane results were estimated because detection was evaluated via TIC library search.

Other Factors Affecting Data Quality: 2-Chloroethyl vinyl ether results were rejected in the samples because the samples were acid preserved. Some MS/MSD %Rs were above the upper quality control limits. TICs were identified in some samples. Results below the RL were estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (September 2016) and "National Functional Guidelines for Inorganic Review" (September 2016). The text of this report has been formulated to address only those areas affecting data quality.

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

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 07804	NSAMPLE	EL-SW01A-081516			EL-SW01B-081516			EL-SW01C-081516			EL-SW01D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-37			240-68359-38			240-68359-39			240-68359-40		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	UJ	C
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE													
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C	0.37	UJ	C	0.37	UJ	C	0.37	U	
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	UJ	C
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		1.5	U	A	2.2	U	A	2.4	U	A	0.94	U	
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	UJ	C
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-081516			MSA-SW37B-081516			MSA-SW37C-081516			MSA-SW37D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-1			240-68359-2			240-68359-3			240-68359-4		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		2.2	U	A	1.4	U	A	2.7	U	A	1.3	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW38B-081516			MSA-SW38C-081516			MSA-SW38D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-6			240-68359-7			240-68359-8		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.33	J	P	0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		0.94	U		1.1	U	A	1.7	U	A	1.1	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-081516			MSA-SW39B-081516			MSA-SW39C-081516			MSA-SW39D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-9			240-68359-10			240-68359-11			240-68359-12		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		1.4	U	A	1	U	A	0.94	U		0.98	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-081516			MSA-SW40B-081516			MSA-SW40C-081516			MSA-SW40D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-13			240-68359-14			240-68359-15			240-68359-16		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		2	U	A	1.7	U	A	1.8	U	A	0.94	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-081516			MSA-SW41B-081516			MSA-SW41C-081516			MSA-SW41D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-17			240-68359-18			240-68359-19			240-68359-20		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.33	J	P	0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		1	U	A	0.97	U	A	1.3	U	A	1.1	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-081516			MSA-SW42B-081516			MSA-SW42C-081516			MSA-SW42D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-21			240-68359-22			240-68359-23			240-68359-24		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C	0.37	UJ	C	0.37	UJ	C	0.37	UJ	C
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		2.1	U	A	2.1	U	A	1.3	U	A	2.1	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-081516			MSA-SW43B-081516			MSA-SW43C-081516			MSA-SW43D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-25			240-68359-26			240-68359-27			240-68359-28		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C	0.37	UJ	C	0.37	UJ	C	0.37	UJ	C
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		1.3	U	A	1.5	U	A	1.4	U	A	1.5	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-081516			MSA-SW44B-081516			MSA-SW44C-081516			MSA-SW44D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-29			240-68359-30			240-68359-31			240-68359-32		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C	0.37	UJ	C	0.37	UJ	C	0.37	UJ	C
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		1.2	U	A	1.3	U	A	1.6	U	A	1.2	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-081516			MSA-SW45B-081516			MSA-SW45C-081516			MSA-SW45D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-33			240-68359-34			240-68359-35			240-68359-36		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C	0.37	UJ	C	0.37	UJ	C	0.37	UJ	C
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.27	U		0.27	U	
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		1.4	U	A	1.4	U	A	1.5	U	A	1.2	U	A
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW46A-081516			MSA-SW47A-081516			MSA-SW48A-081516			MSA-SW49A-081516		
SDG: 240-68359-1	LAB_ID	240-68359-42			240-68359-43			240-68359-44			240-68359-45		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE													
1,1-DICHLOROETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
1,1-DICHLOROETHENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,1-DICHLOROPROPENE		0.42	U		0.42	U		0.42	U		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C	0.37	UJ	C	0.37	UJ	C	0.37	UJ	C
1,2,3-TRICHLOROPROPANE		0.44	U		0.44	U		0.44	U		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U		0.47	U		0.47	U		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U		0.82	U		0.82	U		0.82	U	
1,2-DIBROMOETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
1,2-DICHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
1,2-DICHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,2-DICHLOROPROPANE		0.25	U		0.25	U		0.25	U		0.25	U	
1,3-DICHLOROBENZENE		0.19	U		0.19	U		0.19	J	P	0.19	U	
1,3-DICHLOROPROPANE		0.19	U		0.19	U		0.19	U		0.19	U	
1,4-DICHLOROBENZENE		0.27	U		0.27	U		0.87	J	P	0.27	J	P
2,2-DICHLOROPROPANE		0.26	U		0.26	U		0.26	U		0.26	U	
2-BUTANONE		0.53	U		0.53	U		0.53	U		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M	0.59	UR	M	0.59	UR	M	0.59	UR	M
2-CHLOROTOLUENE		0.4	U		0.4	U		0.4	U		0.4	U	
2-HEXANONE		0.48	U		0.48	U		0.48	U		0.48	U	
4-CHLOROTOLUENE		0.29	U		0.29	U		0.29	U		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U		0.43	U		0.43	U		0.43	U	
4-METHYL-2-PENTANONE		0.99	U		0.99	U		0.99	U		0.99	U	
ACETONE		0.94	U		0.94	U		0.94	U		0.94	U	
BENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
BROMOCHLOROMETHANE		0.5	U		0.5	U		0.5	U		0.5	U	
BROMODICHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMOFORM		0.56	UJ	C	0.56	UJ	C	0.56	UJ	C	0.56	UJ	C
BROMOMETHANE		0.44	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	TB-081516		
SDG: 240-68359-1	LAB_ID	240-68359-41		
FRACTION: OV	SAMP_DATE	8/15/2016		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.28	U	
1,1,1-TRICHLOROETHANE		0.44	U	
1,1,2,2-TETRACHLOROETHANE		0.22	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.45	U	
1,1-DICHLOROETHANE		0.3	U	
1,1-DICHLOROETHENE		0.45	U	
1,1-DICHLOROPROPENE		0.42	U	
1,2,3-TRICHLOROBENZENE		0.37	UJ	C
1,2,3-TRICHLOROPROPANE		0.44	U	
1,2,3-TRIMETHYLBENZENE		0.47	U	
1,2,4-TRICHLOROBENZENE		0.32	U	
1,2,4-TRIMETHYLBENZENE		0.41	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.82	U	
1,2-DIBROMOETHANE		0.32	U	
1,2-DICHLOROBENZENE		0.25	U	
1,2-DICHLOROETHANE		0.23	U	
1,2-DICHLOROPROPANE		0.25	U	
1,3-DICHLOROBENZENE		0.19	U	
1,3-DICHLOROPROPANE		0.19	U	
1,4-DICHLOROBENZENE		0.27	U	
2,2-DICHLOROPROPANE		0.26	U	
2-BUTANONE		0.53	U	
2-CHLOROETHYL VINYL ETHER		0.59	UR	M
2-CHLOROTOLUENE		0.4	U	
2-HEXANONE		0.48	U	
4-CHLOROTOLUENE		0.29	U	
4-ISOPROPYLTOLUENE		0.43	U	
4-METHYL-2-PENTANONE		0.99	U	
ACETONE		0.94	U	
BENZENE		0.35	U	
BROMOBENZENE		0.35	U	
BROMOCHLOROMETHANE		0.5	U	
BROMODICHLOROMETHANE		0.29	U	
BROMOFORM		0.56	UJ	C
BROMOMETHANE		0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	EL-SW01A-081516			EL-SW01B-081516			EL-SW01C-081516			EL-SW01D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-37			240-68359-38			240-68359-39			240-68359-40		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	UJ	C
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE													
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	UJ	C
CIS-1,2-DICHLOROETHENE		0.26	U		0.26	U		0.26	U		0.26	J	P
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	UJ	C
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	UJ	C	4.9	UJ	C	4.9	UJ	C	4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		0.25	J	P	0.32	J	P	0.26	J	P	0.33	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-081516			MSA-SW37B-081516			MSA-SW37C-081516			MSA-SW37D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-1			240-68359-2			240-68359-3			240-68359-4		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		0.26	U		0.26	U		0.26	U		0.26	U	
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U		4.9	U		4.9	U		4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		0.24	J	P	0.3	J	P	0.25	J	P	0.25	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW38B-081516			MSA-SW38C-081516			MSA-SW38D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-6			240-68359-7			240-68359-8		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.69	J	P	0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		10			7.4			0.99	J	P	0.51	J	P
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U		4.9	U		4.9	U		4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		6.3			5.5			1.3			0.72	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-081516			MSA-SW39B-081516			MSA-SW39C-081516			MSA-SW39D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-9			240-68359-10			240-68359-11			240-68359-12		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		0.35	J	P	0.26	J	P	0.26	J	P	0.26	U	
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U		4.9	U		4.9	U		4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		0.24	J	P	0.23	J	P	0.23	J	P	0.22	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-081516			MSA-SW40B-081516			MSA-SW40C-081516			MSA-SW40D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-13			240-68359-14			240-68359-15			240-68359-16		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		3.1			2.2			0.42	J	P	0.26	U	
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U		4.9	U		4.9	U		4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		3.9			4.3			0.72	J	P	0.37	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-081516			MSA-SW41B-081516			MSA-SW41C-081516			MSA-SW41D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-17			240-68359-18			240-68359-19			240-68359-20		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		12			11			0.44	J	P	0.34	J	P
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.32	J	P	0.28	J	P	0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U		4.9	U		4.9	U		4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		6.9			6.1			0.54	J	P	0.47	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-081516			MSA-SW42B-081516			MSA-SW42C-081516			MSA-SW42D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-21			240-68359-22			240-68359-23			240-68359-24		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		2.5			3			1.4			0.26	U	
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	UJ	C	4.9	UJ	C	4.9	UJ	C	4.9	UJ	C
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		0.34	J	P	0.4	J	P	0.41	J	P	0.28	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-081516			MSA-SW43B-081516			MSA-SW43C-081516			MSA-SW43D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-25			240-68359-26			240-68359-27			240-68359-28		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		4.6			3.5			1.4			0.39	J	P
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	UJ	C	4.9	UJ	C	4.9	UJ	C	4.9	UJ	C
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		2.5			2			0.9	J	P	0.53	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-081516			MSA-SW44B-081516			MSA-SW44C-081516			MSA-SW44D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-29			240-68359-30			240-68359-31			240-68359-32		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		1.5			0.46	J	P	0.44	J	P	0.45	J	P
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.37	J	P	0.24	U		0.64	J	P	0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.32	J	P	0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	UJ	C	4.9	UJ	C	4.9	UJ	C	4.9	UJ	C
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.59	J	P	0.23	U		1.1			0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		0.96	J	P	0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		1			0.5	J	P	0.41	J	P	0.49	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-081516			MSA-SW45B-081516			MSA-SW45C-081516			MSA-SW45D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-33			240-68359-34			240-68359-35			240-68359-36		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		0.39	J	P	0.43	J	P	0.35	J	P	0.37	J	P
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	U		0.35	U		0.35	U		0.35	U	
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		0.46	J	P	0.44	J	P
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.25	U		0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	UJ	C	4.9	UJ	C	4.9	UJ	C	4.9	UJ	C
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.86	J	P	0.82	J	P
TOTAL XYLENES		0.52	U		0.52	U		0.52	U		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		0.33	J	P	0.3	J	P	0.4	J	P	0.41	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW46A-081516			MSA-SW47A-081516			MSA-SW48A-081516			MSA-SW49A-081516		
SDG: 240-68359-1	LAB_ID	240-68359-42			240-68359-43			240-68359-44			240-68359-45		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U		0.38	U		0.38	U		0.38	U	
CARBON TETRACHLORIDE		0.43	UJ	C	0.43	UJ	C	0.43	UJ	C	0.43	UJ	C
CHLOROBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
CHLORODIBROMOMETHANE		0.43	UJ	C	0.43	UJ	C	0.43	UJ	C	0.43	UJ	C
CHLORODIFLUOROMETHANE													
CHLOROETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
CHLOROFORM		0.25	U		0.25	U		0.25	U		0.25	U	
CHLOROMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	
CIS-1,2-DICHLOROETHENE		3.2			4.1			18			15		
CIS-1,3-DICHLOROPROPENE		0.46	U		0.46	U		0.46	U		0.46	U	
DIBROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U		0.32	U		0.32	U		0.32	U	
DIISOPROPYL ETHER		0.5	U		0.5	U		0.5	U		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U		0.23	U		0.23	U		0.23	U	
ETHYLBENZENE		0.25	U		0.25	U		0.25	U		0.25	U	
HEXACHLOROBUTADIENE		0.35	UJ	C	0.35	UJ	C	0.35	UJ	C	0.35	UJ	C
ISOPROPYLBENZENE		0.35	U		0.35	U		0.35	U		0.35	U	
M+P-XYLENES		0.24	U		0.24	U		1.6	J	P	0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U		0.2	U		0.2	U		0.2	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.45	U		0.45	U		0.45	U		0.45	U	
N-BUTYLBENZENE		0.31	U		0.31	U		0.31	U		0.31	U	
N-PROPYLBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
O-XYLENE		0.25	U		0.25	U		0.41	J	P	0.25	U	
SEC-BUTYLBENZENE		0.48	U		0.48	U		0.48	U		0.48	U	
STYRENE		0.45	U		0.45	U		0.45	U		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U		0.3	U		0.3	U		0.3	U	
TERT-BUTYLBENZENE		0.41	U		0.41	U		0.41	U		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U		4.9	U		4.9	U		4.9	U	
TETRACHLOROETHENE		0.31	U		0.31	U		0.31	U		0.31	U	
TOLUENE		0.23	U		0.23	U		0.23	U		0.23	U	
TOTAL XYLENES		0.52	U		0.52	U		2			0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U		0.3	U		0.3	U		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U		0.56	U		0.56	U		0.56	U	
TRICHLOROETHENE		5.1			5.6			7			11		

PROJ_NO: 07804	NSAMPLE	TB-081516		
SDG: 240-68359-1	LAB_ID	240-68359-41		
FRACTION: OV	SAMP_DATE	8/15/2016		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U	
CARBON TETRACHLORIDE		0.43	UJ	C
CHLOROBENZENE		0.25	U	
CHLORODIBROMOMETHANE		0.43	UJ	C
CHLORODIFLUOROMETHANE		1	UJ	Q
CHLOROETHANE		0.32	U	
CHLOROFORM		0.25	U	
CHLOROMETHANE		0.44	U	
CIS-1,2-DICHLOROETHENE		0.26	U	
CIS-1,3-DICHLOROPROPENE		0.46	U	
DIBROMOMETHANE		0.42	U	
DICHLORODIFLUOROMETHANE		0.32	U	
DIISOPROPYL ETHER		0.5	U	
ETHYL TERT-BUTYL ETHER		0.23	U	
ETHYLBENZENE		0.25	U	
HEXACHLOROBUTADIENE		0.35	UJ	C
ISOPROPYLBENZENE		0.35	U	
M+P-XYLENES		0.24	U	
METHYL TERT-BUTYL ETHER		0.2	U	
METHYLENE CHLORIDE		0.33	U	
NAPHTHALENE		0.45	U	
N-BUTYLBENZENE		0.31	U	
N-PROPYLBENZENE		0.4	U	
O-XYLENE		0.25	U	
SEC-BUTYLBENZENE		0.48	U	
STYRENE		0.45	U	
TERT-AMYL METHYL ETHER		0.3	U	
TERT-BUTYLBENZENE		0.41	U	
TERTIARY-BUTYL ALCOHOL		4.9	U	
TETRACHLOROETHENE		0.31	U	
TOLUENE		0.23	U	
TOTAL XYLENES		0.52	U	
TRANS-1,2-DICHLOROETHENE		0.3	U	
TRANS-1,3-DICHLOROPROPENE		0.56	U	
TRICHLOROETHENE		0.22	U	

PROJ_NO: 07804	NSAMPLE	EL-SW01A-081516			EL-SW01B-081516			EL-SW01C-081516			EL-SW01D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-37			240-68359-38			240-68359-39			240-68359-40		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	U		0.49	U		0.49	U		0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		0.29	U		0.29	U		0.29	U		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-081516			MSA-SW37B-081516			MSA-SW37C-081516			MSA-SW37D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-1			240-68359-2			240-68359-3			240-68359-4		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C	0.49	UJ	C	0.49	UJ	C	0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		0.29	UJ	C	0.29	UJ	C	0.29	UJ	C	0.29	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW38B-081516			MSA-SW38C-081516			MSA-SW38D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-6			240-68359-7			240-68359-8		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C	0.49	UJ	C	0.49	UJ	C	0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		7.8			4.4			0.43	J	CP	0.29	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-081516			MSA-SW39B-081516			MSA-SW39C-081516			MSA-SW39D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-9			240-68359-10			240-68359-11			240-68359-12		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C	0.49	UJ	C	0.49	UJ	C	0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		0.29	UJ	C	0.29	UJ	C	0.29	UJ	C	0.29	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-081516			MSA-SW40B-081516			MSA-SW40C-081516			MSA-SW40D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-13			240-68359-14			240-68359-15			240-68359-16		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C	0.49	UJ	C	0.49	UJ	C	0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		1.5			0.97			0.29	UJ	C	0.29	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-081516			MSA-SW41B-081516			MSA-SW41C-081516			MSA-SW41D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-17			240-68359-18			240-68359-19			240-68359-20		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C	0.49	UJ	C	0.49	UJ	C	0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		6.8			5.3			0.29	UJ	C	0.29	UJ	C

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-081516			MSA-SW42B-081516			MSA-SW42C-081516			MSA-SW42D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-21			240-68359-22			240-68359-23			240-68359-24		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	U		0.49	U		0.49	U		0.49	U	
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		4.3			5.4			2			0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-081516			MSA-SW43B-081516			MSA-SW43C-081516			MSA-SW43D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-25			240-68359-26			240-68359-27			240-68359-28		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	U		0.49	U		0.49	U		0.49	U	
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		0.7			0.58			0.38	J	P	0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-081516			MSA-SW44B-081516			MSA-SW44C-081516			MSA-SW44D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-29			240-68359-30			240-68359-31			240-68359-32		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	U		0.49	U		0.49	U		0.49	U	
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		0.38	J	P	0.29	U		0.29	U		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-081516			MSA-SW45B-081516			MSA-SW45C-081516			MSA-SW45D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-33			240-68359-34			240-68359-35			240-68359-36		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	U		0.49	U		0.49	U		0.49	U	
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		0.29	U		0.29	U		0.29	U		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW46A-081516			MSA-SW47A-081516			MSA-SW48A-081516			MSA-SW49A-081516		
SDG: 240-68359-1	LAB_ID	240-68359-42			240-68359-43			240-68359-44			240-68359-45		
FRACTION: OV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C	0.49	UJ	C	0.49	UJ	C	0.49	UJ	C
VINYL ACETATE		0.41	U		0.41	U		0.41	U		0.41	U	
VINYL CHLORIDE		1.5			1.9			16			7.5		

PROJ_NO: 07804	NSAMPLE	TB-081516		
SDG: 240-68359-1	LAB_ID	240-68359-41		
FRACTION: OV	SAMP_DATE	8/15/2016		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.49	UJ	C
VINYL ACETATE		0.41	U	
VINYL CHLORIDE		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW39A-081516			MSA-SW40A-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-9			240-68359-13		
FRACTION: TICOV	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1-HEXANOL, 2-ETHYL-					1.3	NJ	Z1			
HEXANAL		1.7	NJ	Z1				1.1	NJ	Z1

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW40A-081516			MSA-SW41A-081516			MSA-SW42A-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-13			240-68359-17			240-68359-21		
FRACTION: OS	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.47	U		0.48	U		0.47	U		0.48	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW46A-081516			MSA-SW47A-081516			MSA-SW48A-081516			MSA-SW49A-081516		
SDG: 240-68359-1	LAB_ID	240-68359-42			240-68359-43			240-68359-44			240-68359-45		
FRACTION: OS	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.47	U		0.47	U		0.72	J	P	0.48	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-081516			MSA-SW37B-081516			MSA-SW37C-081516			MSA-SW37D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-1			240-68359-2			240-68359-3			240-68359-4		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		2.8	U	A	2.4	U	A	1.4	U		1.4	U	
ARSENIC		2.9	J	P	2.3	J	P	2	J	P	2	J	P
BARIUM		34			37			30			39		
BERYLLIUM		2	U	A	2	U		2	U		2.2	U	A
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.88	J	P	0.65	U		0.65	U		0.65	U	
COPPER		5.3	J	P	4.8	J	P	5.8	J	P	7.5	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		5	U	A	3.8	U	A	2.6	U		2.6	U	A
NICKEL		2.3	J	P	1.9	J	P	1.9	J	P	1.9	J	P
SELENIUM		2.4	U		2.4	U		2.4	U		2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		6.2	U	A	4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW38B-081516			MSA-SW38C-081516			MSA-SW38D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-6			240-68359-7			240-68359-8		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		2.4	J	P	2.4	J	P	2.1	J	P	2	J	P
BARIUM		37			36			35			38		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		3	J	P	5.1	J	P	6.8	J	P	6.5	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		2.6	U		2.6	U		2.6	U	A	2.6	U	
NICKEL		2.3	J	P	1.4	J	P	1.4	J	P	1.9	J	P
SELENIUM		2.4	U		2.4	U		2.4	U		2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-081516			MSA-SW39B-081516			MSA-SW39C-081516			MSA-SW39D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-9			240-68359-10			240-68359-11			240-68359-12		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		2.1	J	P	2.2	J	P	2.1	J	P	2.1	J	P
BARIUM		39			42			45			42		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		3.1	J	P	3.3	J	P	4.2	J	P	51		
LEAD		0.8	U		0.8	U		0.8	U		20		
MERCURY		0.09	U		0.14	J	DP	0.17	J	DP	0.1	J	DP
MOLYBDENUM		2.6	U		2.6	U		2.6	U		2.6	U	
NICKEL		2.4	J	P	2.7	J	P	2.3	J	P	2.3	J	P
SELENIUM		2.4	U		2.4	U		2.4	U		2.9	J	P
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		36	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-081516			MSA-SW40B-081516			MSA-SW40C-081516			MSA-SW40D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-13			240-68359-14			240-68359-15			240-68359-16		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		2.6	J	P	2.3	J	P	1.9	J	P	2.2	J	P
BARIUM		34			37			36			41		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		4	J	P	5.7	J	P	5.9	J	P	7.9	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		2.6	U		2.6	U		2.7	U	A	2.6	U	
NICKEL		2.4	J	P	1.8	J	P	1.5	J	P	1.8	J	P
SELENIUM		2.4	U		2.4	U		2.4	U		2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-081516			MSA-SW41B-081516			MSA-SW41C-081516			MSA-SW41D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-17			240-68359-18			240-68359-19			240-68359-20		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		2.2	J	P	2.2	J	P	2	J	P	2.3	J	P
BARIUM		41			39			40			40		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		4.3	J	P	5.4	J	P	7	J	P	7.3	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		2.6	U		2.6	U		2.6	U		2.6	U	A
NICKEL		2.7	J	P	1.7	J	P	1.9	J	P	2.4	J	P
SELENIUM		2.4	U		2.4	U		2.4	U		2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		33	J	P	31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-081516			MSA-SW42B-081516			MSA-SW42C-081516			MSA-SW42D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-21			240-68359-22			240-68359-23			240-68359-24		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.7	U	A	1.4	U		1.4	U	
ARSENIC		2	J	P	2.5	J	P	2.2	J	P	1.8	J	P
BARIUM		37			41			39			38		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		2	U	A	1.3	U		1.3	U	
COBALT		0.65	U		0.71	U	A	0.65	U		0.65	U	
COPPER		4.7	J	P	9.2	J	P	5.8	J	P	6.1	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		2.6	U		3.3	U	A	2.6	U		2.6	U	
NICKEL		2.1	J	P	2.2	J	P	2.2	J	P	2	J	P
SELENIUM		2.4	U		3.8	U	A	4	U	A	2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-081516			MSA-SW43B-081516			MSA-SW43C-081516			MSA-SW43D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-25			240-68359-26			240-68359-27			240-68359-28		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		1.8	J	P	1.8	J	P	1.8	J	P	1.8	U	
BARIUM		38			31			41			40		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.9	U	A	0.65	U		0.65	U		0.65	U	
COPPER		4.2	J	P	3.6	J	P	5.4	J	P	6.3	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		2.6	U		2.6	U		2.6	U		6.7	U	A
NICKEL		2.7	J	P	1.7	J	P	1.9	J	P	2	J	P
SELENIUM		2.4	U	A	2.4	U		2.4	U		2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-081516			MSA-SW44B-081516			MSA-SW44C-081516			MSA-SW44D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-29			240-68359-30			240-68359-31			240-68359-32		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		1.8	J	P	2	J	P	1.9	J	P	1.9	J	P
BARIUM		43			45			42			42		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		4.1	J	P	6.1	J	P	6.3	J	P	6.9	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		4.6	U	A	3.5	U	A	3	U	A	2.7	U	A
NICKEL		2.7	J	P	2.2	J	P	2.4	J	P	2.1	J	P
SELENIUM		2.4	U		2.4	U		2.4	U		2.4	U	
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-081516			MSA-SW45B-081516			MSA-SW45C-081516			MSA-SW45D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-33			240-68359-34			240-68359-35			240-68359-36		
FRACTION: MF	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.4	U		1.4	U		1.4	U		1.4	U	
ARSENIC		1.8	J	P	1.8	U		2	J	P	2.1	J	P
BARIUM		43			35			42			43		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.3	U		1.3	U		1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		3.9	J	P	3	J	P	5.4	J	P	6.9	J	P
LEAD		0.8	U		0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.22			0.13	J	P	0.09	U	
MOLYBDENUM		2.6	U		2.6	U		2.6	U		2.6	U	
NICKEL		2.4	J	P	1.7	J	P	1.7	J	P	2	J	P
SELENIUM		3	U	A	2.4	U		3.2	U	A	2.5	U	A
SILVER		0.15	U		0.15	U		0.15	U		0.15	U	
THALLIUM		1.4	U		1.4	U		1.4	U		1.4	U	
TUNGSTEN		4.5	U		4.5	U		4.5	U		4.5	U	
VANADIUM		2.7	U		2.7	U		2.7	U		2.7	U	
ZINC		31	U		31	U		31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-081516			MSA-SW37B-081516			MSA-SW37C-081516			MSA-SW37D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-1			240-68359-2			240-68359-3			240-68359-4		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		130			140			110			130		
HARDNESS AS CACO3		760			790			570			780		
MAGNESIUM HARDNESS AS CACO3		630			660			460			640		

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW38B-081516			MSA-SW38C-081516			MSA-SW38D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-5			240-68359-6			240-68359-7			240-68359-8		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		140			140			150			140		
HARDNESS AS CACO3		810			820			860			790		
MAGNESIUM HARDNESS AS CACO3		670			680			720			660		

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-081516			MSA-SW39B-081516			MSA-SW39C-081516			MSA-SW39D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-9			240-68359-10			240-68359-11			240-68359-12		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		150			150			150			150		
HARDNESS AS CACO3		840			870			920			900		
MAGNESIUM HARDNESS AS CACO3		700			720			760			750		

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-081516			MSA-SW40B-081516			MSA-SW40C-081516			MSA-SW40D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-13			240-68359-14			240-68359-15			240-68359-16		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		140			140			130			140		
HARDNESS AS CACO3		790			810			760			800		
MAGNESIUM HARDNESS AS CACO3		650			670			630			670		

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-081516			MSA-SW41B-081516			MSA-SW41C-081516			MSA-SW41D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-17			240-68359-18			240-68359-19			240-68359-20		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		150			140			140			150		
HARDNESS AS CACO3		860			850			830			850		
MAGNESIUM HARDNESS AS CACO3		720			710			690			700		

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-081516			MSA-SW42B-081516			MSA-SW42C-081516			MSA-SW42D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-21			240-68359-22			240-68359-23			240-68359-24		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		130			140			140			130		
HARDNESS AS CACO3		750			780			780			760		
MAGNESIUM HARDNESS AS CACO3		610			640			640			630		

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-081516			MSA-SW43B-081516			MSA-SW43C-081516			MSA-SW43D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-25			240-68359-26			240-68359-27			240-68359-28		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		140			120			150			140		
HARDNESS AS CACO3		800			740			890			810		
MAGNESIUM HARDNESS AS CACO3		670			620			740			670		

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-081516			MSA-SW44B-081516			MSA-SW44C-081516			MSA-SW44D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-29			240-68359-30			240-68359-31			240-68359-32		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		140			150			140			150		
HARDNESS AS CACO3		860			920			860			870		
MAGNESIUM HARDNESS AS CACO3		720			770			720			730		

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-081516			MSA-SW45B-081516			MSA-SW45C-081516			MSA-SW45D-081516		
SDG: 240-68359-1	LAB_ID	240-68359-33			240-68359-34			240-68359-35			240-68359-36		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CALCIUM HARDNESS AS CACO3		150			140			140			150		
HARDNESS AS CACO3		880			790			870			880		
MAGNESIUM HARDNESS AS CACO3		730			660			730			730		

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37A-081516 | Lab Sample ID: 240-68359-1

Matrix: Water | Lab File ID: UXM7323.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:51

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	2.2	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37A-081516 | Lab Sample ID: 240-68359-1

Matrix: Water | Lab File ID: UXM7323.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:51

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.24	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37A-081516 | Lab Sample ID: 240-68359-1

Matrix: Water | Lab File ID: UXM7323.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:51

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37A-081516 | Lab Sample ID: 240-68359-1

Matrix: Water | Lab File ID: UXM7323.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:51

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37A-081516 | Lab Sample ID: 240-68359-1

Matrix: Water | Lab File ID: UXM7323.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:51

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37B-081516 | Lab Sample ID: 240-68359-2

Matrix: Water | Lab File ID: UXM7324.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:14

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.4	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37B-081516 | Lab Sample ID: 240-68359-2

Matrix: Water | Lab File ID: UXM7324.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:14

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.30	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37B-081516 | Lab Sample ID: 240-68359-2

Matrix: Water | Lab File ID: UXM7324.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:14

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
2037-26-5	Toluene-d8 (Surr)	103		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37B-081516 | Lab Sample ID: 240-68359-2

Matrix: Water | Lab File ID: UXM7324.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:14

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37B-081516 | Lab Sample ID: 240-68359-2

Matrix: Water | Lab File ID: UXM7324.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:14

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37C-081516 | Lab Sample ID: 240-68359-3

Matrix: Water | Lab File ID: UXM7325.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	2.7	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37C-081516 | Lab Sample ID: 240-68359-3

Matrix: Water | Lab File ID: UXM7325.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.25	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37C-081516 | Lab Sample ID: 240-68359-3

Matrix: Water | Lab File ID: UXM7325.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37C-081516 | Lab Sample ID: 240-68359-3

Matrix: Water | Lab File ID: UXM7325.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37C-081516 | Lab Sample ID: 240-68359-3

Matrix: Water | Lab File ID: UXM7325.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 19:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37D-081516 | Lab Sample ID: 240-68359-4

Matrix: Water | Lab File ID: UXM7326.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:00

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.3	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37D-081516 | Lab Sample ID: 240-68359-4

Matrix: Water | Lab File ID: UXM7326.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:00

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.25	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37D-081516 | Lab Sample ID: 240-68359-4

Matrix: Water | Lab File ID: UXM7326.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:00

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
2037-26-5	Toluene-d8 (Surr)	99		73-124
1868-53-7	Dibromofluoromethane (Surr)	92		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37D-081516 | Lab Sample ID: 240-68359-4

Matrix: Water | Lab File ID: UXM7326.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:00

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW37D-081516 | Lab Sample ID: 240-68359-4

Matrix: Water | Lab File ID: UXM7326.D

Analysis Method: 8260C | Date Collected: 08/15/2016 13:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:00

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: UXM7327.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:23

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	0.33	J	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	0.69	J	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: UXM7327.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:23

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	10		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	6.3		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: UXM7327.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:23

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.: 243081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	92		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: UXM7327.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:23

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.: 243081 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
66-25-1	Hexanal	7.27	1.7	T J N	78%

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 Lab Sample ID: 240-68359-5

Matrix: Water Lab File ID: UXM7327.D

Analysis Method: 8260C Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2016 20:23

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.: 243081 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: UXC7741.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2016 12:27

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.: 244648 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	7.8		0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-132
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: UXC7741.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2016 12:27

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.: 244648 | Units: ug/L

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.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXM7328.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:46

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.1	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXM7328.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:46

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	7.4		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	5.5		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXM7328.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:46

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.: 243081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXM7328.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:46

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXM7328.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 20:46

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXC7742.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2016 12:49

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244648 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.4		0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
2037-26-5	Toluene-d8 (Surr)	103		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38B-081516 | Lab Sample ID: 240-68359-6

Matrix: Water | Lab File ID: UXC7742.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2016 12:49

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244648 | Units: ug/L

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.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38C-081516 | Lab Sample ID: 240-68359-7

Matrix: Water | Lab File ID: UXM7329.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:08

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.7	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38C-081516 | Lab Sample ID: 240-68359-7

Matrix: Water | Lab File ID: UXM7329.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:08

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.99	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.3		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.43	J	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38C-081516 | Lab Sample ID: 240-68359-7

Matrix: Water | Lab File ID: UXM7329.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:08

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38C-081516 | Lab Sample ID: 240-68359-7

Matrix: Water | Lab File ID: UXM7329.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:08

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38C-081516 | Lab Sample ID: 240-68359-7

Matrix: Water | Lab File ID: UXM7329.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:08

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38D-081516 | Lab Sample ID: 240-68359-8

Matrix: Water | Lab File ID: UXM7330.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.1	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38D-081516 | Lab Sample ID: 240-68359-8

Matrix: Water | Lab File ID: UXM7330.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.51	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.72	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38D-081516 | Lab Sample ID: 240-68359-8

Matrix: Water | Lab File ID: UXM7330.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	99		73-124
1868-53-7	Dibromofluoromethane (Surr)	91		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38D-081516 | Lab Sample ID: 240-68359-8

Matrix: Water | Lab File ID: UXM7330.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38D-081516 Lab Sample ID: 240-68359-8

Matrix: Water Lab File ID: UXM7330.D

Analysis Method: 8260C Date Collected: 08/15/2016 11:53

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2016 21:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 243081 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39A-081516 | Lab Sample ID: 240-68359-9

Matrix: Water | Lab File ID: UXM7331.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:54

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.4	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39A-081516 | Lab Sample ID: 240-68359-9

Matrix: Water | Lab File ID: UXM7331.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:54

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.35	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.24	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39A-081516 | Lab Sample ID: 240-68359-9

Matrix: Water | Lab File ID: UXM7331.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:54

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39A-081516 | Lab Sample ID: 240-68359-9

Matrix: Water | Lab File ID: UXM7331.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:54

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.: 243081 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
104-76-7	1-Hexanol, 2-ethyl-	10.31	1.3	T J N	86%

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39A-081516 | Lab Sample ID: 240-68359-9

Matrix: Water | Lab File ID: UXM7331.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:24

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 21:54

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39B-081516 | Lab Sample ID: 240-68359-10

Matrix: Water | Lab File ID: UXM7332.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:16

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.0	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39B-081516 | Lab Sample ID: 240-68359-10

Matrix: Water | Lab File ID: UXM7332.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:16

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.26	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.23	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39B-081516 | Lab Sample ID: 240-68359-10

Matrix: Water | Lab File ID: UXM7332.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:16

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39B-081516 | Lab Sample ID: 240-68359-10

Matrix: Water | Lab File ID: UXM7332.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:16

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39B-081516 | Lab Sample ID: 240-68359-10

Matrix: Water | Lab File ID: UXM7332.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:16

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39C-081516 | Lab Sample ID: 240-68359-11

Matrix: Water | Lab File ID: UXM7333.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39C-081516 | Lab Sample ID: 240-68359-11

Matrix: Water | Lab File ID: UXM7333.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.26	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.23	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39C-081516 | Lab Sample ID: 240-68359-11

Matrix: Water | Lab File ID: UXM7333.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39C-081516 Lab Sample ID: 240-68359-11

Matrix: Water Lab File ID: UXM7333.D

Analysis Method: 8260C Date Collected: 08/15/2016 09:35

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2016 22:39

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 243081 Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39C-081516 | Lab Sample ID: 240-68359-11

Matrix: Water | Lab File ID: UXM7333.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 22:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39D-081516 | Lab Sample ID: 240-68359-12

Matrix: Water | Lab File ID: UXM7334.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	0.98	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39D-081516 | Lab Sample ID: 240-68359-12

Matrix: Water | Lab File ID: UXM7334.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39D-081516 | Lab Sample ID: 240-68359-12

Matrix: Water | Lab File ID: UXM7334.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39D-081516 Lab Sample ID: 240-68359-12

Matrix: Water Lab File ID: UXM7334.D

Analysis Method: 8260C Date Collected: 08/15/2016 09:43

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2016 23:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 243081 Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW39D-081516 | Lab Sample ID: 240-68359-12

Matrix: Water | Lab File ID: UXM7334.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: UXM7335.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:24

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	2.0	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: UXM7335.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:24

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	3.1		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	3.9		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 Lab Sample ID: 240-68359-13

Matrix: Water Lab File ID: UXM7335.D

Analysis Method: 8260C Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2016 23:24

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.: 243081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: UXM7335.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:24

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: UXM7335.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:24

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: UXR4119.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	1.5		0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		63-132
460-00-4	4-Bromofluorobenzene (Surr)	85		73-120
2037-26-5	Toluene-d8 (Surr)	85		73-124
1868-53-7	Dibromofluoromethane (Surr)	106		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: UXR4119.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
66-25-1	Hexanal	7.87	1.1	T J N	53%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXM7336.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:46

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.7	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXM7336.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:46

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	2.2		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	4.3		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXM7336.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:46

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.: 243081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-132
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXM7336.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:46

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXM7336.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 23:46

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXR4120.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 13:12

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	0.97		0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		63-132
460-00-4	4-Bromofluorobenzene (Surr)	80		73-120
2037-26-5	Toluene-d8 (Surr)	85		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40B-081516 | Lab Sample ID: 240-68359-14

Matrix: Water | Lab File ID: UXR4120.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 13:12

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40C-081516 | Lab Sample ID: 240-68359-15

Matrix: Water | Lab File ID: UXM7337.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:09

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.8	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40C-081516 | Lab Sample ID: 240-68359-15

Matrix: Water | Lab File ID: UXM7337.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:09

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.42	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.72	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40C-081516 | Lab Sample ID: 240-68359-15

Matrix: Water | Lab File ID: UXM7337.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:09

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120
2037-26-5	Toluene-d8 (Surr)	99		73-124
1868-53-7	Dibromofluoromethane (Surr)	92		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40C-081516 | Lab Sample ID: 240-68359-15

Matrix: Water | Lab File ID: UXM7337.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:09

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40C-081516 Lab Sample ID: 240-68359-15

Matrix: Water Lab File ID: UXM7337.D

Analysis Method: 8260C Date Collected: 08/15/2016 12:18

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2016 00:09

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.: 243081 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40D-081516 | Lab Sample ID: 240-68359-16

Matrix: Water | Lab File ID: UXM7338.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:23

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:32

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	0.94	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40D-081516 | Lab Sample ID: 240-68359-16

Matrix: Water | Lab File ID: UXM7338.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:23

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:32

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.37	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40D-081516 | Lab Sample ID: 240-68359-16

Matrix: Water | Lab File ID: UXM7338.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:23

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:32

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	104		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40D-081516 | Lab Sample ID: 240-68359-16

Matrix: Water | Lab File ID: UXM7338.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:23

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:32

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40D-081516 Lab Sample ID: 240-68359-16

Matrix: Water Lab File ID: UXM7338.D

Analysis Method: 8260C Date Collected: 08/15/2016 12:23

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2016 00:32

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.: 243081 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXM7339.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:55

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	0.33	J	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.0	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXM7339.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:55

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	12		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	0.32	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	6.9		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXM7339.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:55

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.: 243081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-132
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXM7339.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:55

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXM7339.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 00:55

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXR4121.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 13:34

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	6.8		0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		63-132
460-00-4	4-Bromofluorobenzene (Surr)	85		73-120
2037-26-5	Toluene-d8 (Surr)	88		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: UXR4121.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 13:34

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.: 244276 | Units: ug/L

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.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 | Lab Sample ID: 240-68359-18

Matrix: Water | Lab File ID: UXM7340.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:18

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	0.97	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 | Lab Sample ID: 240-68359-18

Matrix: Water | Lab File ID: UXM7340.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:18

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	11		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	0.28	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	6.1		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 Lab Sample ID: 240-68359-18

Matrix: Water Lab File ID: UXM7340.D

Analysis Method: 8260C Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2016 01:18

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.: 243081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 | Lab Sample ID: 240-68359-18

Matrix: Water | Lab File ID: UXM7340.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:18

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 | Lab Sample ID: 240-68359-18

Matrix: Water | Lab File ID: UXM7340.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:18

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 | Lab Sample ID: 240-68359-18

Matrix: Water | Lab File ID: UXR4122.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 13:56

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.3		0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		63-132
460-00-4	4-Bromofluorobenzene (Surr)	85		73-120
2037-26-5	Toluene-d8 (Surr)	87		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41B-081516 Lab Sample ID: 240-68359-18

Matrix: Water Lab File ID: UXR4122.D

Analysis Method: 8260C Date Collected: 08/15/2016 11:08

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2016 13:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 244276 Units: ug/L

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.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41C-081516 | Lab Sample ID: 240-68359-19

Matrix: Water | Lab File ID: UXM7341.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:40

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.3	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41C-081516 | Lab Sample ID: 240-68359-19

Matrix: Water | Lab File ID: UXM7341.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:40

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.44	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.54	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41C-081516 | Lab Sample ID: 240-68359-19

Matrix: Water | Lab File ID: UXM7341.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:40

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-132
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41C-081516 | Lab Sample ID: 240-68359-19

Matrix: Water | Lab File ID: UXM7341.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 01:40

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41C-081516 Lab Sample ID: 240-68359-19

Matrix: Water Lab File ID: UXM7341.D

Analysis Method: 8260C Date Collected: 08/15/2016 11:11

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2016 01:40

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.: 243081 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41D-081516 | Lab Sample ID: 240-68359-20

Matrix: Water | Lab File ID: UXM7342.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 02:03

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U F1	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.1	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41D-081516 | Lab Sample ID: 240-68359-20

Matrix: Water | Lab File ID: UXM7342.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 02:03

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.34	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.47	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41D-081516 | Lab Sample ID: 240-68359-20

Matrix: Water | Lab File ID: UXM7342.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 02:03

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41D-081516 | Lab Sample ID: 240-68359-20

Matrix: Water | Lab File ID: UXM7342.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 02:03

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41D-081516 | Lab Sample ID: 240-68359-20

Matrix: Water | Lab File ID: UXM7342.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/18/2016 02:03

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42A-081516 | Lab Sample ID: 240-68359-21

Matrix: Water | Lab File ID: UXM7485.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	2.1	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42A-081516 | Lab Sample ID: 240-68359-21

Matrix: Water | Lab File ID: UXM7485.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	2.5		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.34	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	4.3		0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42A-081516 | Lab Sample ID: 240-68359-21

Matrix: Water | Lab File ID: UXM7485.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	98		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42A-081516 | Lab Sample ID: 240-68359-21

Matrix: Water | Lab File ID: UXM7485.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42A-081516 Lab Sample ID: 240-68359-21

Matrix: Water Lab File ID: UXM7485.D

Analysis Method: 8260C Date Collected: 08/15/2016 12:40

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2016 19:21

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 243935 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42B-081516 | Lab Sample ID: 240-68359-22

Matrix: Water | Lab File ID: UXM7486.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	2.1	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42B-081516 | Lab Sample ID: 240-68359-22

Matrix: Water | Lab File ID: UXM7486.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	3.0		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.40	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	5.4		0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42B-081516 | Lab Sample ID: 240-68359-22

Matrix: Water | Lab File ID: UXM7486.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
2037-26-5	Toluene-d8 (Surr)	98		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42B-081516 | Lab Sample ID: 240-68359-22

Matrix: Water | Lab File ID: UXM7486.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42B-081516 | Lab Sample ID: 240-68359-22

Matrix: Water | Lab File ID: UXM7486.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 19:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42C-081516 | Lab Sample ID: 240-68359-23

Matrix: Water | Lab File ID: UXM7487.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:06

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.3	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42C-081516 | Lab Sample ID: 240-68359-23

Matrix: Water | Lab File ID: UXM7487.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:06

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.41	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	2.0		0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42C-081516 | Lab Sample ID: 240-68359-23

Matrix: Water | Lab File ID: UXM7487.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:06

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-132
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
2037-26-5	Toluene-d8 (Surr)	99		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42C-081516 | Lab Sample ID: 240-68359-23

Matrix: Water | Lab File ID: UXM7487.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:06

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42C-081516 | Lab Sample ID: 240-68359-23

Matrix: Water | Lab File ID: UXM7487.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:50

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:06

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42D-081516 | Lab Sample ID: 240-68359-24

Matrix: Water | Lab File ID: UXM7488.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:29

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	2.1	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42D-081516 | Lab Sample ID: 240-68359-24

Matrix: Water | Lab File ID: UXM7488.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:29

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.28	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42D-081516 | Lab Sample ID: 240-68359-24

Matrix: Water | Lab File ID: UXM7488.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:29

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-132
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	96		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42D-081516 | Lab Sample ID: 240-68359-24

Matrix: Water | Lab File ID: UXM7488.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:29

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42D-081516 | Lab Sample ID: 240-68359-24

Matrix: Water | Lab File ID: UXM7488.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:29

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43A-081516 | Lab Sample ID: 240-68359-25

Matrix: Water | Lab File ID: UXM7489.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:52

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.3	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43A-081516 | Lab Sample ID: 240-68359-25

Matrix: Water | Lab File ID: UXM7489.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:52

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	4.6		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	2.5		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.70		0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43A-081516 | Lab Sample ID: 240-68359-25

Matrix: Water | Lab File ID: UXM7489.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:52

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	98		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43A-081516 Lab Sample ID: 240-68359-25

Matrix: Water Lab File ID: UXM7489.D

Analysis Method: 8260C Date Collected: 08/15/2016 10:30

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2016 20:52

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.: 243935 Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43A-081516 | Lab Sample ID: 240-68359-25

Matrix: Water | Lab File ID: UXM7489.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 20:52

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43B-081516 | Lab Sample ID: 240-68359-26

Matrix: Water | Lab File ID: UXM7490.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:15

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.5	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43B-081516 | Lab Sample ID: 240-68359-26

Matrix: Water | Lab File ID: UXM7490.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:15

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	3.5		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	2.0		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.58		0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43B-081516 | Lab Sample ID: 240-68359-26

Matrix: Water | Lab File ID: UXM7490.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:15

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-132
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43B-081516 | Lab Sample ID: 240-68359-26

Matrix: Water | Lab File ID: UXM7490.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:15

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43B-081516 Lab Sample ID: 240-68359-26

Matrix: Water Lab File ID: UXM7490.D

Analysis Method: 8260C Date Collected: 08/15/2016 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2016 21:15

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.: 243935 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43C-081516 | Lab Sample ID: 240-68359-27

Matrix: Water | Lab File ID: UXM7491.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.4	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43C-081516 | Lab Sample ID: 240-68359-27

Matrix: Water | Lab File ID: UXM7491.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.90	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.38	J	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43C-081516 | Lab Sample ID: 240-68359-27

Matrix: Water | Lab File ID: UXM7491.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43C-081516 | Lab Sample ID: 240-68359-27

Matrix: Water | Lab File ID: UXM7491.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43C-081516 | Lab Sample ID: 240-68359-27

Matrix: Water | Lab File ID: UXM7491.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 21:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43D-081516 | Lab Sample ID: 240-68359-28

Matrix: Water | Lab File ID: UXM7492.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.5	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43D-081516 | Lab Sample ID: 240-68359-28

Matrix: Water | Lab File ID: UXM7492.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.39	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.53	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43D-081516 | Lab Sample ID: 240-68359-28

Matrix: Water | Lab File ID: UXM7492.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-132
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	98		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43D-081516 | Lab Sample ID: 240-68359-28

Matrix: Water | Lab File ID: UXM7492.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW43D-081516 Lab Sample ID: 240-68359-28

Matrix: Water Lab File ID: UXM7492.D

Analysis Method: 8260C Date Collected: 08/15/2016 10:48

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2016 22:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 243935 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44A-081516 | Lab Sample ID: 240-68359-29

Matrix: Water | Lab File ID: UXM7493.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:23

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.2	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44A-081516 | Lab Sample ID: 240-68359-29

Matrix: Water | Lab File ID: UXM7493.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:23

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.5		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	0.37	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	0.59	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.38	J	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44A-081516 | Lab Sample ID: 240-68359-29

Matrix: Water | Lab File ID: UXM7493.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:23

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44A-081516 | Lab Sample ID: 240-68359-29

Matrix: Water | Lab File ID: UXM7493.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:23

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44A-081516 | Lab Sample ID: 240-68359-29

Matrix: Water | Lab File ID: UXM7493.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:23

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44B-081516 | Lab Sample ID: 240-68359-30

Matrix: Water | Lab File ID: UXM7494.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:46

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.3	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44B-081516 | Lab Sample ID: 240-68359-30

Matrix: Water | Lab File ID: UXM7494.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:46

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.46	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.50	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44B-081516 | Lab Sample ID: 240-68359-30

Matrix: Water | Lab File ID: UXM7494.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:46

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-132
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44B-081516 | Lab Sample ID: 240-68359-30

Matrix: Water | Lab File ID: UXM7494.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:46

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44B-081516 | Lab Sample ID: 240-68359-30

Matrix: Water | Lab File ID: UXM7494.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 22:46

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44C-081516 | Lab Sample ID: 240-68359-31

Matrix: Water | Lab File ID: UXM7495.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:08

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.6	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44C-081516 | Lab Sample ID: 240-68359-31

Matrix: Water | Lab File ID: UXM7495.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:08

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.44	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	0.64	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	0.32	J	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.1		1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.41	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	0.96	J	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44C-081516 | Lab Sample ID: 240-68359-31

Matrix: Water | Lab File ID: UXM7495.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:08

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44C-081516 | Lab Sample ID: 240-68359-31

Matrix: Water | Lab File ID: UXM7495.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:08

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44C-081516 | Lab Sample ID: 240-68359-31

Matrix: Water | Lab File ID: UXM7495.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:08

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44D-081516 | Lab Sample ID: 240-68359-32

Matrix: Water | Lab File ID: UXM7496.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.2	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44D-081516 | Lab Sample ID: 240-68359-32

Matrix: Water | Lab File ID: UXM7496.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.45	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.49	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44D-081516 | Lab Sample ID: 240-68359-32

Matrix: Water | Lab File ID: UXM7496.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
2037-26-5	Toluene-d8 (Surr)	99		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44D-081516 | Lab Sample ID: 240-68359-32

Matrix: Water | Lab File ID: UXM7496.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW44D-081516 | Lab Sample ID: 240-68359-32

Matrix: Water | Lab File ID: UXM7496.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:31

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45A-081516 | Lab Sample ID: 240-68359-33

Matrix: Water | Lab File ID: UXM7497.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:53

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.4	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45A-081516 | Lab Sample ID: 240-68359-33

Matrix: Water | Lab File ID: UXM7497.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:53

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.39	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.33	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45A-081516 | Lab Sample ID: 240-68359-33

Matrix: Water | Lab File ID: UXM7497.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:53

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45A-081516 | Lab Sample ID: 240-68359-33

Matrix: Water | Lab File ID: UXM7497.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:53

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45A-081516 | Lab Sample ID: 240-68359-33

Matrix: Water | Lab File ID: UXM7497.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 23:53

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45B-081516 | Lab Sample ID: 240-68359-34

Matrix: Water | Lab File ID: UXM7498.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:16

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.4	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45B-081516 | Lab Sample ID: 240-68359-34

Matrix: Water | Lab File ID: UXM7498.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:16

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.43	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.30	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45B-081516 | Lab Sample ID: 240-68359-34

Matrix: Water | Lab File ID: UXM7498.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:16

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	96		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45B-081516 | Lab Sample ID: 240-68359-34

Matrix: Water | Lab File ID: UXM7498.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:16

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45B-081516 | Lab Sample ID: 240-68359-34

Matrix: Water | Lab File ID: UXM7498.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:16

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45C-081516 | Lab Sample ID: 240-68359-35

Matrix: Water | Lab File ID: UXM7499.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.5	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45C-081516 | Lab Sample ID: 240-68359-35

Matrix: Water | Lab File ID: UXM7499.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.35	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	0.46	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	0.86	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.40	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45C-081516 | Lab Sample ID: 240-68359-35

Matrix: Water | Lab File ID: UXM7499.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	98		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45C-081516 | Lab Sample ID: 240-68359-35

Matrix: Water | Lab File ID: UXM7499.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 00:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45C-081516 Lab Sample ID: 240-68359-35

Matrix: Water Lab File ID: UXM7499.D

Analysis Method: 8260C Date Collected: 08/15/2016 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/24/2016 00:39

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 243935 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45D-081516 | Lab Sample ID: 240-68359-36

Matrix: Water | Lab File ID: UXM7500.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:02

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.2	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45D-081516 | Lab Sample ID: 240-68359-36

Matrix: Water | Lab File ID: UXM7500.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:02

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.37	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	0.44	J	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	0.82	J	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.41	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45D-081516 | Lab Sample ID: 240-68359-36

Matrix: Water | Lab File ID: UXM7500.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:02

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	93		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45D-081516 | Lab Sample ID: 240-68359-36

Matrix: Water | Lab File ID: UXM7500.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:02

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW45D-081516 | Lab Sample ID: 240-68359-36

Matrix: Water | Lab File ID: UXM7500.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:02

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01A-081516 | Lab Sample ID: 240-68359-37

Matrix: Water | Lab File ID: UXM7501.D

Analysis Method: 8260C | Date Collected: 08/15/2016 08:56

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:24

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	1.5	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01A-081516 | Lab Sample ID: 240-68359-37

Matrix: Water | Lab File ID: UXM7501.D

Analysis Method: 8260C | Date Collected: 08/15/2016 08:56

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:24

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.25	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01A-081516 Lab Sample ID: 240-68359-37

Matrix: Water Lab File ID: UXM7501.D

Analysis Method: 8260C Date Collected: 08/15/2016 08:56

Sample wt/vol: 5(mL) Date Analyzed: 08/24/2016 01:24

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.: 243935 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01B-081516 | Lab Sample ID: 240-68359-38

Matrix: Water | Lab File ID: UXM7502.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:47

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	2.2	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01B-081516 | Lab Sample ID: 240-68359-38

Matrix: Water | Lab File ID: UXM7502.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 01:47

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.32	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01B-081516 Lab Sample ID: 240-68359-38

Matrix: Water Lab File ID: UXM7502.D

Analysis Method: 8260C Date Collected: 08/15/2016 09:02

Sample wt/vol: 5(mL) Date Analyzed: 08/24/2016 01:47

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.: 243935 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		73-124
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01C-081516 | Lab Sample ID: 240-68359-39

Matrix: Water | Lab File ID: UXM7503.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 02:10

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	2.4	J B	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U *	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01C-081516 | Lab Sample ID: 240-68359-39

Matrix: Water | Lab File ID: UXM7503.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/24/2016 02:10

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.26	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01C-081516 Lab Sample ID: 240-68359-39

Matrix: Water Lab File ID: UXM7503.D

Analysis Method: 8260C Date Collected: 08/15/2016 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/24/2016 02:10

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.: 243935 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		73-124
1868-53-7	Dibromofluoromethane (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01D-081516 | Lab Sample ID: 240-68359-40

Matrix: Water | Lab File ID: UXR4148.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2016 12:56

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01D-081516 | Lab Sample ID: 240-68359-40

Matrix: Water | Lab File ID: UXR4148.D

Analysis Method: 8260C | Date Collected: 08/15/2016 09:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2016 12:56

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	0.26	J	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	0.33	J	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: EL-SW01D-081516 Lab Sample ID: 240-68359-40

Matrix: Water Lab File ID: UXR4148.D

Analysis Method: 8260C Date Collected: 08/15/2016 09:11

Sample wt/vol: 5(mL) Date Analyzed: 08/26/2016 12:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 244438 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	83		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: TB-081516 | Lab Sample ID: 240-68359-41

Matrix: Water | Lab File ID: UXR4123.D

Analysis Method: 8260C | Date Collected: 08/15/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:18

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
108-86-1	Bromobenzene	1.0	U	1.0	0.35
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: TB-081516 | Lab Sample ID: 240-68359-41

Matrix: Water | Lab File ID: UXR4123.D

Analysis Method: 8260C | Date Collected: 08/15/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:18

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
91-20-3	Naphthalene	1.0	U	1.0	0.45
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
78-93-3	2-Butanone	5.0	U	5.0	0.53
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: TB-081516 | Lab Sample ID: 240-68359-41

Matrix: Water | Lab File ID: UXR4123.D

Analysis Method: 8260C | Date Collected: 08/15/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:18

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		63-132
460-00-4	4-Bromofluorobenzene (Surr)	84		73-120
2037-26-5	Toluene-d8 (Surr)	88		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: TB-081516 | Lab Sample ID: 240-68359-41

Matrix: Water | Lab File ID: UXR4123.D

Analysis Method: 8260C | Date Collected: 08/15/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:18

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.: 244276 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: TB-081516 | Lab Sample ID: 240-68359-41

Matrix: Water | Lab File ID: UXR4123.D

Analysis Method: 8260C | Date Collected: 08/15/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:18

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW46A-081516 | Lab Sample ID: 240-68359-42

Matrix: Water | Lab File ID: UXR4124.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:40

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW46A-081516 | Lab Sample ID: 240-68359-42

Matrix: Water | Lab File ID: UXR4124.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 14:40

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	3.2		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	5.1		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	1.5		0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW46A-081516 Lab Sample ID: 240-68359-42

Matrix: Water Lab File ID: UXR4124.D

Analysis Method: 8260C Date Collected: 08/15/2016 12:31

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2016 14:40

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.: 244276 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		73-124
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	82		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW47A-081516 | Lab Sample ID: 240-68359-43

Matrix: Water | Lab File ID: UXR4125.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 15:02

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW47A-081516 | Lab Sample ID: 240-68359-43

Matrix: Water | Lab File ID: UXR4125.D

Analysis Method: 8260C | Date Collected: 08/15/2016 12:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 15:02

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	4.1		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	5.6		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	1.9		0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW47A-081516 Lab Sample ID: 240-68359-43

Matrix: Water Lab File ID: UXR4125.D

Analysis Method: 8260C Date Collected: 08/15/2016 12:02

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2016 15:02

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.: 244276 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	84		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	84		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW48A-081516 | Lab Sample ID: 240-68359-44

Matrix: Water | Lab File ID: UXR4126.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 15:25

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	0.19	J	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	0.87	J	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW48A-081516 | Lab Sample ID: 240-68359-44

Matrix: Water | Lab File ID: UXR4126.D

Analysis Method: 8260C | Date Collected: 08/15/2016 11:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 15:25

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	18		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	1.6	J	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	0.41	J	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	7.0		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	16		0.50	0.29
1330-20-7	Xylenes, Total	2.0		2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW48A-081516 Lab Sample ID: 240-68359-44

Matrix: Water Lab File ID: UXR4126.D

Analysis Method: 8260C Date Collected: 08/15/2016 11:22

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2016 15:25

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.: 244276 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		73-124
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW49A-081516 | Lab Sample ID: 240-68359-45

Matrix: Water | Lab File ID: UXR4118.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:28

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	0.27	J	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
78-93-3	2-Butanone	5.0	U	5.0	0.53
110-75-8	2-Chloroethyl vinyl ether	10	U F1	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
67-64-1	Acetone	5.0	U	5.0	0.94
71-43-2	Benzene	1.0	U	1.0	0.35
108-86-1	Bromobenzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43
75-00-3	Chloroethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW49A-081516 | Lab Sample ID: 240-68359-45

Matrix: Water | Lab File ID: UXR4118.D

Analysis Method: 8260C | Date Collected: 08/15/2016 10:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:28

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.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.25
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	15		1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-95-3	Dibromomethane	1.0	U	1.0	0.42
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.45
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
95-47-6	o-Xylene	1.0	U	1.0	0.25
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
100-42-5	Styrene	1.0	U	1.0	0.45
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	11		1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	7.5		0.50	0.29
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW49A-081516 Lab Sample ID: 240-68359-45

Matrix: Water Lab File ID: UXR4118.D

Analysis Method: 8260C Date Collected: 08/15/2016 10:55

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2016 12:28

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.: 244276 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	84		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		63-132

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW38A-081516 | Lab Sample ID: 240-68359-5

Matrix: Water | Lab File ID: 60819019.D

Analysis Method: 8270D | Date Collected: 08/15/2016 11:31

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1050(mL) | Date Analyzed: 08/19/2016 15:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	44		17-120
4165-62-2	Phenol-d5 (Surr)	16		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	59		36-120
367-12-4	2-Fluorophenol (Surr)	26		10-120
321-60-8	2-Fluorobiphenyl (Surr)	63		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	52		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW40A-081516 | Lab Sample ID: 240-68359-13

Matrix: Water | Lab File ID: 60819020.D

Analysis Method: 8270D | Date Collected: 08/15/2016 12:09

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1020(mL) | Date Analyzed: 08/19/2016 15:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.98	U	0.98	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	56		17-120
4165-62-2	Phenol-d5 (Surr)	25		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	81		36-120
367-12-4	2-Fluorophenol (Surr)	41		10-120
321-60-8	2-Fluorobiphenyl (Surr)	77		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	65		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW41A-081516 | Lab Sample ID: 240-68359-17

Matrix: Water | Lab File ID: 60819021.D

Analysis Method: 8270D | Date Collected: 08/15/2016 11:04

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1050(mL) | Date Analyzed: 08/19/2016 15:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	56		17-120
4165-62-2	Phenol-d5 (Surr)	23		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	79		36-120
367-12-4	2-Fluorophenol (Surr)	39		10-120
321-60-8	2-Fluorobiphenyl (Surr)	76		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	60		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW42A-081516 | Lab Sample ID: 240-68359-21

Matrix: Water | Lab File ID: 60819022.D

Analysis Method: 8270D | Date Collected: 08/15/2016 12:40

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1030(mL) | Date Analyzed: 08/19/2016 16:19

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.97	U	0.97	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	53		17-120
4165-62-2	Phenol-d5 (Surr)	23		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	84		36-120
367-12-4	2-Fluorophenol (Surr)	39		10-120
321-60-8	2-Fluorobiphenyl (Surr)	79		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	77		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW46A-081516 | Lab Sample ID: 240-68359-42

Matrix: Water | Lab File ID: 60819023.D

Analysis Method: 8270D | Date Collected: 08/15/2016 12:31

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1050(mL) | Date Analyzed: 08/19/2016 16:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	48		17-120
4165-62-2	Phenol-d5 (Surr)	19		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	76		36-120
367-12-4	2-Fluorophenol (Surr)	33		10-120
321-60-8	2-Fluorobiphenyl (Surr)	71		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	63		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW47A-081516 | Lab Sample ID: 240-68359-43

Matrix: Water | Lab File ID: 60819024.D

Analysis Method: 8270D | Date Collected: 08/15/2016 12:02

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1050(mL) | Date Analyzed: 08/19/2016 17:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	47		17-120
4165-62-2	Phenol-d5 (Surr)	22		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	77		36-120
367-12-4	2-Fluorophenol (Surr)	39		10-120
321-60-8	2-Fluorobiphenyl (Surr)	76		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	60		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW48A-081516 | Lab Sample ID: 240-68359-44

Matrix: Water | Lab File ID: 60819025.D

Analysis Method: 8270D | Date Collected: 08/15/2016 11:22

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 870(mL) | Date Analyzed: 08/19/2016 17:36

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.72	J	1.1	0.56

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	59		17-120
4165-62-2	Phenol-d5 (Surr)	25		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	77		36-120
367-12-4	2-Fluorophenol (Surr)	41		10-120
321-60-8	2-Fluorobiphenyl (Surr)	75		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	65		35-125

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: MSA-SW49A-081516 | Lab Sample ID: 240-68359-45

Matrix: Water | Lab File ID: 60819026.D

Analysis Method: 8270D | Date Collected: 08/15/2016 10:55

Extract. Method: 3510C | Date Extracted: 08/17/2016 07:44

Sample wt/vol: 1030(mL) | Date Analyzed: 08/19/2016 18:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 243319 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.97	U	0.97	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	57		17-120
4165-62-2	Phenol-d5 (Surr)	21		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	79		36-120
367-12-4	2-Fluorophenol (Surr)	37		10-120
321-60-8	2-Fluorobiphenyl (Surr)	79		42-120
118-79-6	2,4,6-Tribromophenol (Surr)	66		35-125

Appendix C

Support Documentation

LMC - MARTIN STATE AIRPORT
SDG 240-68359-1

SAMPLE IDENTIFICATION	MSA-SW48A-081516
COMPOUND	CIS-1,2-DICHLOROETHENE
COMPOUND AREA	636371
INTERNAL STANDARD AMOUNT (ng)	50
VOLUME WATER PURGED (ml)	5
DILUTION FACTOR	1
INTERNAL STANDARD AREA	1169899
AVERAGE RRF	0.3038
ml to µl	1000
ng to µg	1000

17.9 µg/L

636371 x 50ng x 1 x 1000ml X 1µg /1169899 x 0.3038 x 5ml x 1L x 1000ng

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX17\20160825-57464.b\UXR4126.D
Lims ID: 240-68359-B-44
Client ID: MSA-SW48A-081516
Sample Type: Client
Inject. Date: 25-Aug-2016 15:25:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0057464-015
Operator ID: 001644 Instrument ID: A3UX17

Method: \\ChromNA\Canton\ChromData\A3UX17\20160825-57464.b\8260_17.m
Limit Group: MSV 8260C ICAL
Last Update: 26-Aug-2016 09:07:59 Calib Date: 06-Jun-2016 21:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX17\20160606-55171.b\UXR2600.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: williamsla Date: 25-Aug-2016 16:09:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.763	5.763	0.000	99	1169899	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.000	84	966199	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	93	523480	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	94	302019	10.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.490	0.001	0	409037	11.7	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	1192498	8.96	
$ 7 4-Bromofluorobenzene (Surr	95	9.594	9.582	0.012	96	432656	8.76	
9 Dichlorodifluoromethane	85		1.648				ND	
10 Chloromethane	50		1.838				ND	
11 Vinyl chloride	62	1.957	1.968	-0.011	98	516188	15.7	
12 Bromomethane	94		2.324				ND	
13 Chloroethane	64		2.431				ND	
15 Trichlorofluoromethane	101		2.668				ND	
19 1,1-Dichloroethene	96	3.190	3.178	0.012	95	7116	0.2210	
20 1,1,2-Trichloro-1,2,2-trif	151		3.214				ND	
21 Acetone	43		3.237				ND	
23 Carbon disulfide	76	3.392	3.391	0.001	98	11962	0.1472	
27 Methylene Chloride	84		3.640				ND	
28 2-Methyl-2-propanol	59		3.735				ND	
30 Methyl tert-butyl ether	73		3.878				ND	
31 trans-1,2-Dichloroethene	96	3.890	3.889	0.001	93	6022	0.1821	
33 1,1-Dichloroethane	63		4.269				ND	
34 Vinyl acetate	43		4.305				ND	
35 Isopropyl ether	87		4.305				ND	
37 Tert-butyl ethyl ether	59		4.625				ND	
39 cis-1,2-Dichloroethene	96	4.779	4.779	0.000	77	636371	17.9	
38 2,2-Dichloropropane	77		4.779				ND	
40 2-Butanone (MEK)	43		4.791				ND	
44 Chlorobromomethane	128		4.992				ND	
46 Chloroform	83		5.052				ND	
47 1,1,1-Trichloroethane	97		5.206				ND	
49 1,1-Dichloropropene	75		5.348				ND	

MARTIN STATE AIRPORT
SDG 240-68359-1

SAMPLE IDENTIFICATION	MSA-SW48A-081516
COMPOUND	1,4-DIOXANE
COMPOUND AREA	5002
INTERNAL STANDARD AMOUNT (ng/ml)	4
DILUTION FACTOR	1
INTERNAL STANDARD AREA	99773
AVERAGE RRF	0.6412
SAMPLE VOLUME (ml)	870
VOLUME EXTRACT (µl)	2000
VOLUME INJECTED (µl)	1
CONCENTRATION =	0.71897 µg/L

5002 x 4 ng/µl x 2000µl x 1/(99773 x 0.6412 x 870ml x 1µl)

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A4HP9\20160819-57253.b\60819025.D
Lims ID: 240-68359-E-44-A
Client ID: MSA-SW48A-081516
Sample Type: Client
Inject. Date: 19-Aug-2016 17:36:30 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0057253-025
Misc. Info.: 240-68359-E-44-A
Operator ID: 001710 Instrument ID: A4HP9

Method: \\ChromNA\Canton\ChromData\A4HP9\20160819-57253.b\8270 _9.m
Limit Group: MSS 8270D ICAL
Last Update: 20-Aug-2016 10:35:13 Calib Date: 12-Aug-2016 21:50:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A4HP9\20160812-57045.b\60812028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-Aug-2016 10:28:49

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.376	6.382	-0.006	90	99773	4.00	
*	2 Naphthalene-d8	136	7.497	7.498	-0.001	98	383362	4.00	
*	3 Acenaphthene-d10	164	8.997	8.998	-0.001	93	201005	4.00	
*	4 Phenanthrene-d10	188	10.267	10.268	-0.001	97	338809	4.00	
*	5 Chrysene-d12	240	12.551	12.552	-0.001	97	323473	4.00	
*	6 Perylene-d12	264	14.325	14.326	-0.001	97	217203	4.00	
$	7 2-Fluorophenol	112	5.150	5.149	0.001	97	137561	4.14	
$	8 Phenol-d5	99	6.016	6.019	-0.003	95	116149	2.45	
$	9 Nitrobenzene-d5	82	6.853	6.856	-0.003	92	389857	7.68	
$	10 2-Fluorobiphenyl (Surr)	172	8.396	8.400	-0.004	98	437123	7.46	
$	11 2,4,6-Tribromophenol	330	9.666	9.669	-0.003	76	42938	6.52	
$	12 Terphenyl-d14	244	11.584	11.583	0.001	97	316053	5.88	
	25 1,4-Dioxane	88	2.856	2.855	0.001	0	5002	0.3128	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

SMIS80PPMW_00014 Amount Added: 5.00 Units: uL Run Reagent

Sample Report

Sample Table

Sample Name	240-68359-d-12-a@5
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10081816G.b
Acq Date Time	2016-08-18T20:54:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

MSA-SW39D-081516

10.116 X 5
=50.6 ug/L

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.623	4.623	4.18	172063	0.00	10000	
Be	9	6	2	NoGas	0.056	0.056	48.16	519	0.01	2000	
B	11	45	2	NoGas	130.340	130.340	1.38	299439	0.04	300	
Na	23	45	1	He	297520.498	297520.498	1.58	190567341	0.16	500000	
Mg	24	45	1	He	36526.525	36526.525	0.53	11338850	0.32	500000	
Al	27	45	1	He	5.571	5.571	13.40	667	0.84	200000	
K	39	45	1	He	11436.127	11436.127	1.32	3039411	0.38	500000	
Ca	44	45	1	He	11885.436	11885.436	0.29	155982	7.62	500000	
Ti	47	45	1	He	0.022	0.022	252.26	6	0.40	2500	
V	51	45	1	He	0.108	0.108	114.09	321	0.03	10000	
Cr	52	45	1	He	0.063	0.063	16.94	703	0.01	10000	
Mn	55	45	1	He	4.473	4.473	0.59	9234	0.05	10000	
Fe	56	45	1	He	1.950	1.950	6.43	7897	0.02	200000	
Co	59	45	1	He	0.015	0.015	47.80	130	0.01	5000	
Ni	60	45	1	He	0.461	0.461	6.30	909	0.05	10000	
Cu	63	45	1	He	10.116	10.116	1.87	44267	0.02	10000	
Zn	66	45	1	He	7.210	7.210	2.82	4747	0.15	10000	
As	75	115	1	He	0.415	0.415	6.43	269	0.15	10000	
Se	78	115	1	He	0.584	0.584	46.15	58	1.01	10000	
Sr	88	103	1	He	218.925	218.925	0.66	575448	0.04	10000	
Mo	95	103	1	He	0.440	0.440	11.43	998	0.04	2000	
Ag	107	103	1	He	0.001	0.001	262.94	16	0.00	300	
Cd	111	115	1	He	0.022	0.022	33.64	26	0.08	4000	
Sn	118	115	1	He	0.278	0.278	22.82	996	0.03	2000	
Sb	123	115	1	He	0.065	0.065	28.66	207	0.03	200	
Ba	137	115	1	He	8.393	8.393	2.24	9781	0.09	10000	
W	182	159	1	He	0.031	0.031	43.57	430	0.01	2500	
Tl	205	165	1	He	0.011	0.011	22.62	281	0.00	2000	
Pb	208	165	1	He	3.931	3.931	2.19	100418	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1413257	0.33	1282157	110.22	60	120	
Sc	45	1	He	333980	1.03	314244	106.28	60	120	
Sc	45	2	NoGas	7134979	1.00	5857064	121.82	60	120	ISTD warning
Rh	103	1	He	1726581	0.69	1783022	96.83	60	120	
In	115	1	He	691874	0.86	706130	97.98	60	120	
Tb	159	1	He	2512684	0.32	2602595	96.55	60	120	
Ho	165	1	He	2627058	1.05	2689864	97.67	60	120	
Bi	209	1	He	1839494	0.12	2008070	91.61	60	120	

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0.9/1.9 0.2/1.2
0.6/1.6 1.8/2.8

BALTIMORE

180325

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: John McFadden	Carrier: Fedex	1 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: MULLIS
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC07804.09	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Dissolved Metals (6020B/7470A)	Hardness	1,4-dioxane (8270C)	Sample Specific Notes:
MSA-SW37A-081516	8/15/2016	1303	SW	Water	4	x	x	x	x		
MSA-SW37B-081516	8/15/2016	1307	SW	Water	4	x	x	x	x		
MSA-SW37C-081516	8/15/2016	1311	SW	Water	4	x	x	x	x		
MSA-SW37D-081516	8/15/2016	1321	SW	Water	4	x	x	x	x		
MSA-SW38A-081516	8/15/2016	1131	SW	Water	6	x	x	x	x	X	
MSA-SW38B-081516	8/15/2016	1140	SW	Water	4	x	x	x	x		
MSA-SW38C-081516	8/15/2016	1148	SW	Water	4	x	x	x	x		
MSA-SW38D-081516	8/15/2016	1153	SW	Water	4	x	x	x	x		
MSA-SW39A-081516	8/15/2016	0924	SW	Water	4	x	x	x	x		
MSA-SW39B-081516	8/15/2016	0930	SW	Water	4	x	x	x	x		
MSA-SW39C-081516	8/15/2016	0935	SW	Water	4	x	x	x	x		
MSA-SW39D-081516	8/15/2016	0943	SW	Water	4	x	x	x	x		
							2	4	4	1	

240-68359 Chain of Custody

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

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

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

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/15/16/1505		TA	8/15/16 /1505
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8-15-2016/1635	Rajan Henderson	TA	8-16-16 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

180325 0.9/1.9 0.2/1.2
0.6/1.6 1.8/2.8

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

BALTIMORE

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	2 of 4 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC07804.09	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Dissolved Metals (6020B/7470A)	Hardness	1,4-dioxane (8270C)	Sample Specific Notes:
MSA-SW40A-081516	8/15/2016	1209	SW	Water	6	x	x	x	x	X	
MSA-SW40B-081516	8/15/2016	1215	SW	Water	4	x	x	x	x		
MSA-SW40C-081516	8/15/2016	1218	SW	Water	4	x	x	x	x		
MSA-SW40D-081516	8/15/2016	1223	SW	Water	4	x	x	x	x		
MSA-SW41A-081516	8/15/2016	1104	SW	Water	6	x	x	x	x	X	
MSA-SW41B-081516	8/15/2016	1108	SW	Water	4	x	x	x	x		
MSA-SW41C-081516	8/15/2016	1111	SW	Water	4	x	x	x	x		
MSA-SW41D-081516	8/15/2016	1115	SW	Water	4	x	x	x	x		
MSA-SW42A-081516	8/15/2016	1240	SW	Water	6	x	x	x	x	X	* 1240 Time
MSA-SW42B-081516	8/15/2016	1244	SW	Water	4	x	x	x	x		* 1244 Time
MSA-SW42C-081516	8/15/2016	1250	SW	Water	4	x	x	x	x		* 1250 Time
MSA-SW42D-081516	8/15/2016	1253	SW	Water	4	x	x	x	x		
							2	4	4	1	

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

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

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

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/15/16/1505	[signature]	TA	8/15/16/1505
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 8-15-2016/1625	Received by: Regan Henderson	Company: TA	Date/Time: 8-16-16 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

180325

0.9/1.9 0.2/1.2
0.6/1.6 1.8/2.8

BALTIMORE

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	3 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			Sampler: Mullis
Project # 112IC07804.09	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Dissolved Metals (6020B/7470A)	Hardness	Sample Specific Notes:
MSA-SW43A-081516	8/15/2016	1030	SW	Water	4	x	x	x	x	
MSA-SW43B-081516	8/15/2016	1035	SW	Water	4	x	x	x	x	
MSA-SW43C-081516	8/15/2016	1041	SW	Water	4	x	x	x	x	
MSA-SW43D-081516	8/15/2016	1048	SW	Water	4	x	x	x	x	
MSA-SW44A-081516	8/15/2016	1010	SW	Water	4	x	x	x	x	
MSA-SW44B-081516	8/15/2016	1015	SW	Water	4	x	x	x	x	
MSA-SW44C-081516	8/15/2016	1018	SW	Water	4	x	x	x	x	
MSA-SW44D-081516	8/15/2016	1022	SW	Water	4	x	x	x	x	
MSA-SW45A-081516	8/15/2016	0949	SW	Water	4	x	x	x	x	
MSA-SW45B-081516	8/15/2016	0953	SW	Water	4	x	x	x	x	
MSA-SW45C-081516	8/15/2016	1000	SW	Water	4	x	x	x	x	
MSA-SW45D-081516	8/15/2016	1003	SW	Water	4	x	x	x	x	
							2	4	4	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

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

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

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/15/16 1505		TA	8/15/16 1505
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	8-16-2016/1635	Regan Henderson	TA	8.16.16 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

180325 0.9/1.9 0.2/1.2 0.6/1.6 1.8/2.8

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

BALTIMORE

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	4 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) ____			
(301) 528-3021 Phone	TAT if different from Below STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC07804.09	☐ 1 day			Sampler: Mullis

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (8260C)	1,4-dioxane (8270C)	Sample Specific Notes:
EL-SW01A-081516	8/15/2016	0856	SW	AQ	3		x		
EL-SW01B-081516	8/15/2016	0902	SW	AQ	3		x		
EL-SW01C-081516	8/15/2016	0907	SW	AQ	3		x		
EL-SW01D-081516	8/15/2016	0911	SW	AQ	3		x		
TB-081516	--	--	TB	AQ	2		x		
MSA-SW46A-081516	8/15/2016	1231	SW	AQ	5		x	X	
MSA-SW47A-081516	8/15/2016	1202	SW	AQ	5		x	X	
MSA-SW48A-081516	8/15/2016	1122	SW	AQ	5		x	X	
MSA-SW49A-081516	8/15/2016	1055	SW	AQ	5		x	X	

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

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

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

Special Instructions/QC Requirements & Comments: DISSOLVED METALS FILTERED IN FIELD, samples on this page to be analyzed for VOCs ONLY

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/15/16 1505	[signature]	TT	8/15/16 1505
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 8-15-2016/1636	Received by: Regan Henderson	Company: TA	Date/Time: 8-16-16 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 108359**

Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by: Ryan Henderson

Cooler Received on 8-16-16 Opened on 8-16-16

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

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

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

☑ See Multiple Cooler Form

1. Cooler temperature upon receipt
   IR GUN# IR-8 (CF +1.3 °C) Observed Cooler Temp._____ °C Corrected Cooler Temp._____ °C
   IR GUN#36 (CF +1.0°C) Observed Cooler Temp._____ °C Corrected Cooler Temp._____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 each Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? 4+0+q? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC574756**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # N/A Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

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

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) 43c X1 were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative Login # : 108359
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	36	0.2	1.2	wet ice
↓	↓	0.6	1.6	↓
↓	↓	0.9	1.9	↓
↓	↓	1.8	2.8	↓

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water

Report Number: 240-68359-1

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 8/16/2016 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.2º C, 1.6º C, 1.9º C and 2.8º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3), MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19), MSA-SW41D-081516 (240-68359-20), MSA-SW42A-081516 (240-68359-21), MSA-SW42B-081516 (240-68359-22), MSA-SW42C-081516 (240-68359-23), MSA-SW42D-081516 (240-68359-24), MSA-SW43A-081516 (240-68359-25), MSA-SW43B-081516 (240-68359-26), MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31), MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35), MSA-SW45D-081516 (240-68359-36), EL-SW01A-081516 (240-68359-37), EL-SW01B-081516 (240-68359-38), EL-SW01C-081516 (240-68359-39), EL-SW01D-081516 (240-68359-40), TB-081516 (240-68359-41), MSA-SW46A-081516 (240-68359-42), MSA-SW47A-081516 (240-68359-43), MSA-SW48A-081516 (240-68359-44) and MSA-SW49A-081516 (240-68359-45) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/17/2016, 08/18/2016, 08/23/2016, 08/24/2016, 08/25/2016, 08/26/2016 and 08/29/2016.

Acetone was detected in method blank MB 240-243081/6 and MB 240-243935/7 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.

2-Chloroethyl vinyl ether cannot be reliably recovered in an acid preserved sample. The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium. The following samples were received in acid preserved vials: MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3), MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19), MSA-SW41D-081516 (240-68359-20), MSA-SW42A-081516 (240-68359-21), MSA-SW42B-081516 (240-68359-22),

MSA-SW42C-081516 (240-68359-23), MSA-SW42D-081516 (240-68359-24), MSA-SW43A-081516 (240-68359-25), MSA-SW43B-081516 (240-68359-26), MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31), MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35), MSA-SW45D-081516 (240-68359-36), EL-SW01A-081516 (240-68359-37), EL-SW01B-081516 (240-68359-38), EL-SW01C-081516 (240-68359-39), EL-SW01D-081516 (240-68359-40), TB-081516 (240-68359-41), MSA-SW46A-081516 (240-68359-42), MSA-SW47A-081516 (240-68359-43), MSA-SW48A-081516 (240-68359-44) and MSA-SW49A-081516 (240-68359-45).

The continuing calibration verification (CCV) for analytical batch 243081 exceeded control criteria for multiple compounds. The samples associated with this CCV were non-detects for the affected analytes. In accordance with the laboratory SOP, a low level CCV at the reporting limit (labeled as an MRL) was analyzed and the affected compounds were detected; therefore the data has been reported. No further corrective action was required. MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3), MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19) and MSA-SW41D-081516 (240-68359-20)

The continuing calibration verification (CCV) for analytical batch 224276 exceeded control criteria for multiple compounds. The samples associated with this CCV were non-detects for the affected analytes. In accordance with the laboratory SOP, a low level CCV at the reporting limit (labeled as an MRL) was analyzed and the affected compounds were detected; therefore the data has been reported. No further corrective action was required. MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), TB-081516 (240-68359-41), MSA-SW46A-081516 (240-68359-42), MSA-SW47A-081516 (240-68359-43), MSA-SW48A-081516 (240-68359-44) and MSA-SW49A-081516 (240-68359-45)

The continuing calibration verification (CCV) for analytical batch 244438 exceeded control criteria for multiple compounds. The samples associated with this CCV were non-detects for the affected analytes. In accordance with the laboratory SOP, a low level CCV at the reporting limit (labeled as an MRL) was analyzed and the affected compounds were detected; therefore the data has been reported. No further corrective action was required. EL-SW01D-081516 (240-68359-40)

The continuing calibration verification (CCV) analyzed in batch 240-243935 was outside the method criteria for multiple analytes. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): MSA-SW39D-081516 (240-68359-12). The sample had a pH of 5.

The low-level confirmation standard associated to (CCV 240-243935/5) was run outside of the tune time, because of an auto-sampler failure. This is a batch QC sample; therefore, the results have been reported.

The laboratory control sample (LCS) for analytical batch 240-243935 recovered outside control limits for chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Chloromethane and Dichlorodifluoromethane failed the recovery criteria low for LCS 240-244648/4. 1,1,1,2-Tetrachloroethane, 1,2-Dibromo-3-Chloropropane and cis-1,3-Dichloropropene failed the recovery criteria high.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-243935.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 240-244648.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW38A-081516 (240-68359-5), MSA-SW40A-081516 (240-68359-13), MSA-SW41A-081516 (240-68359-17), MSA-SW42A-081516 (240-68359-21), MSA-SW46A-081516 (240-68359-42), MSA-SW47A-081516 (240-68359-43), MSA-SW48A-081516 (240-68359-44) and MSA-SW49A-081516 (240-68359-45) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/17/2016 and analyzed on 08/19/2016.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 240-242932.

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

DISSOLVED METALS (ICPMS)

Samples MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3),

MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19), MSA-SW41D-081516 (240-68359-20), MSA-SW42A-081516 (240-68359-21), MSA-SW42B-081516 (240-68359-22), MSA-SW42C-081516 (240-68359-23), MSA-SW42D-081516 (240-68359-24), MSA-SW43A-081516 (240-68359-25), MSA-SW43B-081516 (240-68359-26), MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31), MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35) and MSA-SW45D-081516 (240-68359-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/17/2016 and analyzed on 08/18/2016, 08/19/2016, 08/20/2016 and 08/22/2016.

Chromium was detected in method blank MB 240-242972/1-A 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.

The continuing calibration verification (CCV) associated with batch 240-243587 recovered above the upper control limit for molybdenum. The samples associated with this CCV were below the requested reporting limit for the affected analytes; therefore, the data have been reported. The following samples are impacted: MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31), MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35) and MSA-SW45D-081516 (240-68359-36).

The following samples was diluted due to the nature of the sample matrix: MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3), MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19), MSA-SW41D-081516 (240-68359-20), MSA-SW42A-081516 (240-68359-21), MSA-SW42B-081516 (240-68359-22), MSA-SW42C-081516 (240-68359-23), MSA-SW42D-081516 (240-68359-24), MSA-SW43A-081516 (240-68359-25), MSA-SW43B-081516 (240-68359-26), MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31), MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35) and MSA-SW45D-081516 (240-68359-36). Elevated reporting limits (RLs) are provided.

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

DISSOLVED MERCURY (CVAA)

Samples MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3), MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19), MSA-SW41D-081516 (240-68359-20), MSA-SW42A-081516 (240-68359-21), MSA-SW42B-081516 (240-68359-22), MSA-SW42C-081516 (240-68359-23), MSA-SW42D-081516 (240-68359-24), MSA-SW43A-081516 (240-68359-25), MSA-SW43B-081516 (240-68359-26), MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31), MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35) and MSA-SW45D-081516 (240-68359-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/17/2016 and analyzed on 08/18/2016.

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

DISSOLVED HARDNESS (AS CACO3) BY CALCULATION

Samples MSA-SW37A-081516 (240-68359-1), MSA-SW37B-081516 (240-68359-2), MSA-SW37C-081516 (240-68359-3), MSA-SW37D-081516 (240-68359-4), MSA-SW38A-081516 (240-68359-5), MSA-SW38B-081516 (240-68359-6), MSA-SW38C-081516 (240-68359-7), MSA-SW38D-081516 (240-68359-8), MSA-SW39A-081516 (240-68359-9), MSA-SW39B-081516 (240-68359-10), MSA-SW39C-081516 (240-68359-11), MSA-SW39D-081516 (240-68359-12), MSA-SW40A-081516 (240-68359-13), MSA-SW40B-081516 (240-68359-14), MSA-SW40C-081516 (240-68359-15), MSA-SW40D-081516 (240-68359-16), MSA-SW41A-081516 (240-68359-17), MSA-SW41B-081516 (240-68359-18), MSA-SW41C-081516 (240-68359-19), MSA-SW41D-081516 (240-68359-20), MSA-SW42A-081516 (240-68359-21), MSA-SW42B-081516 (240-68359-22), MSA-SW42C-081516 (240-68359-23), MSA-SW42D-081516 (240-68359-24), MSA-SW43A-081516 (240-68359-25), MSA-SW43B-081516 (240-68359-26), MSA-SW43C-081516 (240-68359-27), MSA-SW43D-081516 (240-68359-28), MSA-SW44A-081516 (240-68359-29), MSA-SW44B-081516 (240-68359-30), MSA-SW44C-081516 (240-68359-31),

MSA-SW44D-081516 (240-68359-32), MSA-SW45A-081516 (240-68359-33), MSA-SW45B-081516 (240-68359-34), MSA-SW45C-081516 (240-68359-35) and MSA-SW45D-081516 (240-68359-36) were analyzed for dissolved hardness (as CaCO3) by calculation in accordance with SM 2340B. The samples were analyzed on 08/23/2016.

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

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc. Job Number: 240-68359-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD is outside acceptance limits.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	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.
Metals		
	B	Compound was found in the blank and sample.
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
	U	Indicates the analyte was analyzed for but not detected.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-68359-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-68359-1	MSA-SW37A-081516	Water	08/15/2016 1303	08/16/2016 0930
240-68359-2	MSA-SW37B-081516	Water	08/15/2016 1307	08/16/2016 0930
240-68359-3	MSA-SW37C-081516	Water	08/15/2016 1311	08/16/2016 0930
240-68359-4	MSA-SW37D-081516	Water	08/15/2016 1321	08/16/2016 0930
240-68359-5	MSA-SW38A-081516	Water	08/15/2016 1131	08/16/2016 0930
240-68359-6	MSA-SW38B-081516	Water	08/15/2016 1140	08/16/2016 0930
240-68359-7	MSA-SW38C-081516	Water	08/15/2016 1148	08/16/2016 0930
240-68359-8	MSA-SW38D-081516	Water	08/15/2016 1153	08/16/2016 0930
240-68359-9	MSA-SW39A-081516	Water	08/15/2016 0924	08/16/2016 0930
240-68359-10	MSA-SW39B-081516	Water	08/15/2016 0930	08/16/2016 0930
240-68359-11	MSA-SW39C-081516	Water	08/15/2016 0935	08/16/2016 0930
240-68359-12	MSA-SW39D-081516	Water	08/15/2016 0943	08/16/2016 0930
240-68359-13	MSA-SW40A-081516	Water	08/15/2016 1209	08/16/2016 0930
240-68359-14	MSA-SW40B-081516	Water	08/15/2016 1215	08/16/2016 0930
240-68359-15	MSA-SW40C-081516	Water	08/15/2016 1218	08/16/2016 0930
240-68359-16	MSA-SW40D-081516	Water	08/15/2016 1223	08/16/2016 0930
240-68359-17	MSA-SW41A-081516	Water	08/15/2016 1104	08/16/2016 0930
240-68359-18	MSA-SW41B-081516	Water	08/15/2016 1108	08/16/2016 0930
240-68359-19	MSA-SW41C-081516	Water	08/15/2016 1111	08/16/2016 0930
240-68359-20	MSA-SW41D-081516	Water	08/15/2016 1115	08/16/2016 0930
240-68359-21	MSA-SW42A-081516	Water	08/15/2016 1240	08/16/2016 0930
240-68359-22	MSA-SW42B-081516	Water	08/15/2016 1244	08/16/2016 0930
240-68359-23	MSA-SW42C-081516	Water	08/15/2016 1250	08/16/2016 0930
240-68359-24	MSA-SW42D-081516	Water	08/15/2016 1253	08/16/2016 0930
240-68359-25	MSA-SW43A-081516	Water	08/15/2016 1030	08/16/2016 0930
240-68359-26	MSA-SW43B-081516	Water	08/15/2016 1035	08/16/2016 0930
240-68359-27	MSA-SW43C-081516	Water	08/15/2016 1041	08/16/2016 0930
240-68359-28	MSA-SW43D-081516	Water	08/15/2016 1048	08/16/2016 0930
240-68359-29	MSA-SW44A-081516	Water	08/15/2016 1010	08/16/2016 0930
240-68359-30	MSA-SW44B-081516	Water	08/15/2016 1015	08/16/2016 0930
240-68359-31	MSA-SW44C-081516	Water	08/15/2016 1018	08/16/2016 0930
240-68359-32	MSA-SW44D-081516	Water	08/15/2016 1022	08/16/2016 0930
240-68359-33	MSA-SW45A-081516	Water	08/15/2016 0949	08/16/2016 0930
240-68359-34	MSA-SW45B-081516	Water	08/15/2016 0953	08/16/2016 0930
240-68359-35	MSA-SW45C-081516	Water	08/15/2016 1000	08/16/2016 0930
240-68359-36	MSA-SW45D-081516	Water	08/15/2016 1003	08/16/2016 0930
240-68359-37	EL-SW01A-081516	Water	08/15/2016 0856	08/16/2016 0930
240-68359-38	EL-SW01B-081516	Water	08/15/2016 0902	08/16/2016 0930
240-68359-39	EL-SW01C-081516	Water	08/15/2016 0907	08/16/2016 0930
240-68359-40	EL-SW01D-081516	Water	08/15/2016 0911	08/16/2016 0930
240-68359-41	TB-081516	Water	08/15/2016 0000	08/16/2016 0930
240-68359-42	MSA-SW46A-081516	Water	08/15/2016 1231	08/16/2016 0930
240-68359-43	MSA-SW47A-081516	Water	08/15/2016 1202	08/16/2016 0930
240-68359-44	MSA-SW48A-081516	Water	08/15/2016 1122	08/16/2016 0930
240-68359-45	MSA-SW49A-081516	Water	08/15/2016 1055	08/16/2016 0930

METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-68359-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL CAN	SW846 8260C	
Purge and Trap	TAL CAN		SW846 5030C
Semivolatile Organic Compounds (GC/MS)	TAL CAN	SW846 8270D	
Liquid-Liquid Extraction (Separatory Funnel)	TAL CAN		SW846 3510C
Metals (ICP/MS)	TAL CAN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL CAN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL CAN	SW846 7470A	
Preparation, Mercury	TAL CAN		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
Total Hardness (as CaCO3) by calculation	TAL CAN	SM SM 2340B	
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

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 #
MSA-SW37A-081516	240-68359-1	96	92	102	95
MSA-SW37B-081516	240-68359-2	94	93	103	98
MSA-SW37C-081516	240-68359-3	93	92	100	92
MSA-SW37D-081516	240-68359-4	92	90	99	96
MSA-SW38A-081516	240-68359-5	103	94	102	98
MSA-SW38A-081516	240-68359-5	92	93	101	95
MSA-SW38B-081516	240-68359-6	102	93	103	98
MSA-SW38B-081516	240-68359-6	93	90	100	95
MSA-SW38C-081516	240-68359-7	95	90	100	92
MSA-SW38D-081516	240-68359-8	91	90	99	94
MSA-SW39A-081516	240-68359-9	94	92	102	96
MSA-SW39B-081516	240-68359-10	93	89	101	91
MSA-SW39C-081516	240-68359-11	94	90	101	90
MSA-SW39D-081516	240-68359-12	95	93	100	89
MSA-SW40A-081516	240-68359-13	93	92	101	90
MSA-SW40A-081516	240-68359-13	106	114	85	85
MSA-SW40B-081516	240-68359-14	96	95	101	93
MSA-SW40B-081516	240-68359-14	103	119	85	80
MSA-SW40C-081516	240-68359-15	92	90	99	91
MSA-SW40D-081516	240-68359-16	95	93	104	95
MSA-SW41A-081516	240-68359-17	94	88	102	96
MSA-SW41A-081516	240-68359-17	103	116	88	85
MSA-SW41B-081516	240-68359-18	94	90	102	92
MSA-SW41B-081516	240-68359-18	102	112	87	85
MSA-SW41C-081516	240-68359-19	94	88	100	93
MSA-SW41D-081516	240-68359-20	94	90	100	89
MSA-SW42A-081516	240-68359-21	95	89	98	94
MSA-SW42B-081516	240-68359-22	96	90	98	98
MSA-SW42C-081516	240-68359-23	93	88	99	96
MSA-SW42D-081516	240-68359-24	95	88	96	92
MSA-SW43A-081516	240-68359-25	95	90	98	93
MSA-SW43B-081516	240-68359-26	93	87	100	93
MSA-SW43C-081516	240-68359-27	94	89	97	94
MSA-SW43D-081516	240-68359-28	95	91	98	95
MSA-SW44A-081516	240-68359-29	95	89	97	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	63-132
TOL = Toluene-d8 (Surr)	73-124
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

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 #
MSA-SW44B-081516	240-68359-30	94	88	97	93
MSA-SW44C-081516	240-68359-31	94	89	97	94
MSA-SW44D-081516	240-68359-32	95	92	99	96
MSA-SW45A-081516	240-68359-33	94	90	97	93
MSA-SW45B-081516	240-68359-34	96	90	96	92
MSA-SW45C-081516	240-68359-35	98	92	97	91
MSA-SW45D-081516	240-68359-36	93	89	97	94
EL-SW01A-081516	240-68359-37	96	91	97	95
EL-SW01B-081516	240-68359-38	95	90	96	94
EL-SW01C-081516	240-68359-39	94	89	99	95
EL-SW01D-081516	240-68359-40	102	117	90	83
TB-081516	240-68359-41	103	115	88	84
MSA-SW46A-081516	240-68359-42	101	117	87	82
MSA-SW47A-081516	240-68359-43	103	116	84	84
MSA-SW48A-081516	240-68359-44	104	117	90	88
MSA-SW49A-081516	240-68359-45	103	111	87	84
	MB 240-243081/6	91	89	103	95
	MB 240-243935/7	96	91	101	96
	MB 240-244276/6	103	113	86	84
	MB 240-244438/7	100	111	89	84
	MB 240-244648/6	102	94	103	98
	LCS 240-243081/3	96	90	100	95
	LCS 240-243935/4	91	82	98	99
	LCS 240-244276/4	104	112	91	96
	LCS 240-244438/4	102	107	93	95
	LCS 240-244648/4	105	91	106	104
	LCSD 240-244438/5	100	105	90	98
MSA-SW41D-081516 MS	240-68359-20 MS	93	87	101	94
MSA-SW49A-081516 MS	240-68359-45 MS	101	107	89	94
MSA-SW41D-081516 MSD	240-68359-20 MSD	92	89	98	95
MSA-SW49A-081516 MSD	240-68359-45 MSD	102	110	90	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	63-132
TOL = Toluene-d8 (Surr)	73-124
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: STD8260 240-235701/4 Date Analyzed: 06/23/2016 12:46

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC9010.D Heated Purge: (Y/N) N

Calibration ID: 34931

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1646184	5.13	1222360	7.81	530154	10.04
UPPER LIMIT		3292368	5.63	2444720	8.31	1060308	10.54
LOWER LIMIT		823092	4.63	611180	7.31	265077	9.54
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-235701/14		1661685	5.13	1268289	7.81	530949	10.04
ICV 240-235701/15		1649875	5.13	1270373	7.81	493234	10.04
CCVIS 240-244648/2		1533934	5.03	1167143	7.68	637826	9.91

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCVIS 240-244648/2 Date Analyzed: 08/29/2016 09:51

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC7734.D Heated Purge: (Y/N) N

Calibration ID: 34933

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1533934	5.03	1167143	7.68	637826	9.91
UPPER LIMIT		3067868	5.53	2334286	8.18	1275652	10.41
LOWER LIMIT		766967	4.53	583572	7.18	318913	9.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-244648/4		1587757	5.03	1211485	7.68	660372	9.91
CCV 240-244648/3		1532780	5.03	1164810	7.68	592452	9.91
MB 240-244648/6		1512288	5.03	1163686	7.68	597806	9.91
240-68359-5	MSA-SW38A-081516	1468023	5.03	1124624	7.68	564588	9.91
240-68359-6	MSA-SW38B-081516	1441297	5.03	1088012	7.68	546529	9.91

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 VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: STD8260 240-232711/4 Date Analyzed: 06/01/2016 12:51

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5572.D Heated Purge: (Y/N) N

Calibration ID: 34643

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1415622	5.17	1000389	7.87	522407	10.10
UPPER LIMIT		2831244	5.67	2000778	8.37	1044814	10.60
LOWER LIMIT		707811	4.67	500195	7.37	261204	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-232711/9		1350700	5.17	956772	7.85	515548	10.10
ICV 240-232711/16		1312230	5.17	922566	7.85	494155	10.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: ICIS 240-239770/9 Date Analyzed: 07/26/2016 13:10

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM6778.D Heated Purge: (Y/N) N

Calibration ID: 35356

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1223901	5.17	829550	7.87	437401	10.10
UPPER LIMIT		2447802	5.67	1659100	8.37	874802	10.60
LOWER LIMIT		611951	4.67	414775	7.37	218701	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-239770/12		1223643	5.17	824798	7.87	448316	10.10
CCVIS 240-243081/2		1099221	5.17	733948	7.87	365747	10.10
CCVIS 240-243935/3		1235887	5.17	839295	7.87	426767	10.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCVIS 240-243081/2 Date Analyzed: 08/17/2016 16:58

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM7318.D Heated Purge: (Y/N) N

Calibration ID: 35356

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1099221	5.17	733948	7.87	365747	10.10
UPPER LIMIT		2198442	5.67	1467896	8.37	731494	10.60
LOWER LIMIT		549611	4.67	366974	7.37	182874	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-243081/3		1052740	5.17	723409	7.87	358861	10.10
CCV 240-243081/4		1025681	5.17	683578	7.87	346514	10.10
MB 240-243081/6		1056837	5.17	682198	7.87	350166	10.10
240-68359-1	MSA-SW37A-081516	1022055	5.17	681604	7.87	347923	10.10
240-68359-2	MSA-SW37B-081516	1026379	5.17	661125	7.87	352946	10.10
240-68359-3	MSA-SW37C-081516	1009126	5.17	664465	7.87	343442	10.10
240-68359-4	MSA-SW37D-081516	1038448	5.17	695715	7.85	339737	10.10
240-68359-5	MSA-SW38A-081516	1046892	5.17	682861	7.87	345361	10.10
240-68359-6	MSA-SW38B-081516	1028638	5.17	686672	7.87	346218	10.10
240-68359-7	MSA-SW38C-081516	1008381	5.17	675626	7.87	338838	10.10
240-68359-8	MSA-SW38D-081516	1028224	5.17	678041	7.87	343214	10.10
240-68359-9	MSA-SW39A-081516	1051883	5.17	679706	7.85	342603	10.10
240-68359-10	MSA-SW39B-081516	1002085	5.17	663200	7.87	326380	10.10
240-68359-11	MSA-SW39C-081516	979616	5.17	679836	7.85	323081	10.10
240-68359-12	MSA-SW39D-081516	978835	5.17	672722	7.87	321337	10.10
240-68359-13	MSA-SW40A-081516	998706	5.17	680686	7.87	335250	10.10
240-68359-14	MSA-SW40B-081516	1013968	5.17	694144	7.87	348014	10.10
240-68359-15	MSA-SW40C-081516	1012114	5.17	693137	7.87	338863	10.10
240-68359-16	MSA-SW40D-081516	974316	5.17	661479	7.87	329406	10.10
240-68359-17	MSA-SW41A-081516	991084	5.17	656307	7.87	331020	10.10
240-68359-18	MSA-SW41B-081516	982983	5.17	657924	7.87	328364	10.10
240-68359-19	MSA-SW41C-081516	985432	5.17	669093	7.87	330228	10.10
240-68359-20	MSA-SW41D-081516	1023948	5.17	692430	7.87	334394	10.10
240-68359-20 MS	MSA-SW41D-081516 MS	1021409	5.17	698334	7.85	353105	10.10
240-68359-20 MSD	MSA-SW41D-081516 MSD	1016748	5.17	683736	7.87	358134	10.10

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCVIS 240-243935/3 Date Analyzed: 08/23/2016 17:28

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM7480.D Heated Purge: (Y/N) N

Calibration ID: 35356

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1235887	5.17	839295	7.87	426767	10.10
UPPER LIMIT		2471774	5.67	1678590	8.37	853534	10.60
LOWER LIMIT		617944	4.67	419648	7.37	213384	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-243935/4		1245190	5.17	839191	7.87	425198	10.10
CCV 240-243935/5		1235407	5.17	834308	7.87	407935	10.10
MB 240-243935/7		1166947	5.17	805788	7.87	408225	10.10
240-68359-21	MSA-SW42A-081516	1160576	5.17	814808	7.87	411651	10.10
240-68359-22	MSA-SW42B-081516	1173138	5.17	818242	7.87	403122	10.10
240-68359-23	MSA-SW42C-081516	1244974	5.17	846908	7.87	425815	10.10
240-68359-24	MSA-SW42D-081516	1169939	5.17	814247	7.87	404056	10.10
240-68359-25	MSA-SW43A-081516	1181849	5.17	822059	7.87	414282	10.10
240-68359-26	MSA-SW43B-081516	1199271	5.17	811940	7.85	403937	10.10
240-68359-27	MSA-SW43C-081516	1187874	5.17	804305	7.85	403770	10.10
240-68359-28	MSA-SW43D-081516	1168544	5.17	809982	7.87	398053	10.10
240-68359-29	MSA-SW44A-081516	1164635	5.17	795918	7.87	401191	10.10
240-68359-30	MSA-SW44B-081516	1200490	5.17	816958	7.87	409704	10.10
240-68359-31	MSA-SW44C-081516	1130333	5.17	777319	7.87	389016	10.10
240-68359-32	MSA-SW44D-081516	1134232	5.17	774377	7.85	379377	10.10
240-68359-33	MSA-SW45A-081516	1192433	5.17	835464	7.87	405439	10.10
240-68359-34	MSA-SW45B-081516	1171848	5.17	804894	7.87	396107	10.10
240-68359-35	MSA-SW45C-081516	1155150	5.17	811839	7.85	391403	10.10
240-68359-36	MSA-SW45D-081516	1211516	5.17	817016	7.87	409276	10.10
240-68359-37	EL-SW01A-081516	1205390	5.17	829354	7.85	410660	10.10
240-68359-38	EL-SW01B-081516	1189032	5.17	821820	7.87	407415	10.10
240-68359-39	EL-SW01C-081516	1156531	5.17	794330	7.87	395138	10.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: STD8260 240-233329/4 Date Analyzed: 06/06/2016 17:52

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR2590.D Heated Purge: (Y/N) N

Calibration ID: 34730

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2008684	5.76	1551513	8.48	855367	10.72
UPPER LIMIT		4017368	6.26	3103026	8.98	1710734	11.22
LOWER LIMIT		1004342	5.26	775757	7.98	427684	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-233329/8		1919748	5.76	1450753	8.47	839948	10.72
ICV 240-233329/15		1850277	5.76	1471163	8.48	730516	10.72
CCVIS 240-244276/2		1399342	5.76	1120651	8.48	678108	10.72
CCVIS 240-244438/2		1438930	5.76	1150717	8.48	701209	10.72

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCVIS 240-244276/2 Date Analyzed: 08/25/2016 10:31

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR4113.D Heated Purge: (Y/N) N

Calibration ID: 34732

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1399342	5.76	1120651	8.48	678108	10.72
UPPER LIMIT		2798684	6.26	2241302	8.98	1356216	11.22
LOWER LIMIT		699671	5.26	560326	7.98	339054	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-244276/4		1360354	5.76	1121133	8.48	695054	10.72
CCV 240-244276/3		1378304	5.76	1165813	8.48	616072	10.72
MB 240-244276/6		1254227	5.76	1038056	8.48	567006	10.72
240-68359-45	MSA-SW49A-081516	1245768	5.76	1002223	8.48	540611	10.72
240-68359-13	MSA-SW40A-081516	1197701	5.76	1037878	8.48	544876	10.72
240-68359-14	MSA-SW40B-081516	1181215	5.76	1016970	8.48	542073	10.72
240-68359-17	MSA-SW41A-081516	1200570	5.76	980044	8.48	534766	10.72
240-68359-18	MSA-SW41B-081516	1195409	5.76	986504	8.48	523289	10.72
240-68359-41	TB-081516	1173075	5.76	953924	8.48	517085	10.72
240-68359-42	MSA-SW46A-081516	1166747	5.76	953724	8.48	516140	10.72
240-68359-43	MSA-SW47A-081516	1162868	5.76	1004545	8.48	526139	10.72
240-68359-44	MSA-SW48A-081516	1169899	5.76	966199	8.48	523480	10.72
240-68359-45 MS	MSA-SW49A-081516 MS	1317476	5.76	1077511	8.48	656025	10.72
240-68359-45 MSD	MSA-SW49A-081516 MSD	1328007	5.76	1096763	8.48	683625	10.72

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCVIS 240-244438/2 Date Analyzed: 08/26/2016 10:42

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR4142.D Heated Purge: (Y/N) N

Calibration ID: 34732

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1438930	5.76	1150717	8.48	701209	10.72
UPPER LIMIT		2877860	6.26	2301434	8.98	1402418	11.22
LOWER LIMIT		719465	5.26	575359	7.98	350605	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-244438/3		1411610	5.76	1200867	8.48	628516	10.72
LCS 240-244438/4		1414065	5.76	1134975	8.48	735255	10.72
LCSD 240-244438/5		1451057	5.76	1175337	8.48	714122	10.72
MB 240-244438/7		1318839	5.76	1071972	8.48	574172	10.72
240-68359-40	EL-SW01D-081516	1257993	5.76	1053681	8.48	566101	10.72

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: UXM7322.D Lab Sample ID: MB 240-243081/6

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

Instrument ID: A3UX16 Date Analyzed: 08/17/2016 18:29

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 240-243081/3	UXM7319.D	08/17/2016 17:21
MSA-SW37A-081516	240-68359-1	UXM7323.D	08/17/2016 18:51
MSA-SW37B-081516	240-68359-2	UXM7324.D	08/17/2016 19:14
MSA-SW37C-081516	240-68359-3	UXM7325.D	08/17/2016 19:37
MSA-SW37D-081516	240-68359-4	UXM7326.D	08/17/2016 20:00
MSA-SW38A-081516	240-68359-5	UXM7327.D	08/17/2016 20:23
MSA-SW38B-081516	240-68359-6	UXM7328.D	08/17/2016 20:46
MSA-SW38C-081516	240-68359-7	UXM7329.D	08/17/2016 21:08
MSA-SW38D-081516	240-68359-8	UXM7330.D	08/17/2016 21:31
MSA-SW39A-081516	240-68359-9	UXM7331.D	08/17/2016 21:54
MSA-SW39B-081516	240-68359-10	UXM7332.D	08/17/2016 22:16
MSA-SW39C-081516	240-68359-11	UXM7333.D	08/17/2016 22:39
MSA-SW39D-081516	240-68359-12	UXM7334.D	08/17/2016 23:01
MSA-SW40A-081516	240-68359-13	UXM7335.D	08/17/2016 23:24
MSA-SW40B-081516	240-68359-14	UXM7336.D	08/17/2016 23:46
MSA-SW40C-081516	240-68359-15	UXM7337.D	08/18/2016 00:09
MSA-SW40D-081516	240-68359-16	UXM7338.D	08/18/2016 00:32
MSA-SW41A-081516	240-68359-17	UXM7339.D	08/18/2016 00:55
MSA-SW41B-081516	240-68359-18	UXM7340.D	08/18/2016 01:18
MSA-SW41C-081516	240-68359-19	UXM7341.D	08/18/2016 01:40
MSA-SW41D-081516	240-68359-20	UXM7342.D	08/18/2016 02:03
MSA-SW41D-081516 MS	240-68359-20 MS	UXM7343.D	08/18/2016 02:25
MSA-SW41D-081516 MSD	240-68359-20 MSD	UXM7344.D	08/18/2016 02:48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243081/6

Matrix: Water | Lab File ID: UXM7322.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:29

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.80	J	5.0	0.94
108-86-1	Bromobenzene	1.0	U	1.0	0.35
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243081/6

Matrix: Water | Lab File ID: UXM7322.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:29

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
78-93-3	2-Butanone	5.0	U	5.0	0.53
91-20-3	Naphthalene	1.0	U	1.0	0.45
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-243081/6

Matrix: Water Lab File ID: UXM7322.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2016 18:29

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.: 243081 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		73-124
1868-53-7	Dibromofluoromethane (Surr)	91		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243081/6

Matrix: Water | Lab File ID: UXM7322.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:29

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.: 243081 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243081/6

Matrix: Water | Lab File ID: UXM7322.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/17/2016 18:29

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.: 243081 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7319.D

Lab ID: LCS 240-243081/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.90	99	77-126	
1,1,1-Trichloroethane	10.0	10.4	104	79-133	
1,1,2,2-Tetrachloroethane	10.0	10.7	107	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.5	115	65-151	
1,1-Dichloroethane	10.0	10.4	104	77-121	
1,1-Dichloroethene	10.0	11.4	114	70-141	
1,1-Dichloropropene	10.0	10.5	105	80-120	
1,2,3-Trichlorobenzene	10.0	9.52	95	53-135	
1,2,3-Trichloropropane	10.0	10.6	106	65-135	
1,2,4-Trichlorobenzene	10.0	9.41	94	53-137	
1,2,4-Trimethylbenzene	10.0	10.6	106	77-120	
1,2-Dibromo-3-Chloropropane	10.0	10.8	108	46-140	
1,2-Dichlorobenzene	10.0	10.2	102	80-120	
1,2-Dichloroethane	10.0	9.49	95	76-130	
1,2-Dichloropropane	10.0	10.3	103	79-121	
1,3-Dichlorobenzene	10.0	10.5	105	80-120	
1,3-Dichloropropane	10.0	10.1	101	77-120	
1,4-Dichlorobenzene	10.0	10.1	101	80-120	
2,2-Dichloropropane	10.0	10.7	107	70-137	
2-Chloroethyl vinyl ether	10.0	10.3	103	51-138	
2-Chlorotoluene	10.0	10.8	108	76-120	
2-Hexanone	20.0	16.9	85	56-124	
4-Chlorotoluene	10.0	10.8	108	77-120	
p-Isopropyltoluene	10.0	10.1	101	75-120	
Acetone	20.0	16.9	84	46-120	
Bromobenzene	10.0	10.5	105	79-120	
Benzene	10.0	10.3	103	80-120	
Bromoform	10.0	9.47	95	52-157	
Bromomethane	10.0	12.5	125	24-160	
Carbon disulfide	10.0	11.5	115	58-160	
Carbon tetrachloride	10.0	11.1	111	69-149	
Chlorobenzene	10.0	10.4	104	80-120	
Chloroethane	10.0	12.8	128	24-147	
Chloroform	10.0	10.3	103	80-120	
Chloromethane	10.0	10.1	101	50-135	
cis-1,2-Dichloroethene	10.0	10.3	103	80-120	
cis-1,3-Dichloropropene	10.0	10.7	107	75-120	
Bromochloromethane	10.0	10.0	100	77-125	
Dibromomethane	10.0	9.43	94	73-127	
Bromodichloromethane	10.0	10.0	100	76-125	
Dichlorodifluoromethane	10.0	11.1	111	32-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7319.D

Lab ID: LCS 240-243081/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	10.0	10.4	104	80-120	
Hexachlorobutadiene	10.0	10.3	103	55-134	
Isopropylbenzene	10.0	10.0	100	80-120	
m-Xylene & p-Xylene	10.0	10.6	106	80-120	
2-Butanone	20.0	17.5	87	54-122	
Naphthalene	10.0	10.3	103	39-148	
4-Methyl-2-pentanone	20.0	18.4	92	60-131	
n-Butylbenzene	10.0	9.83	98	66-120	
n-Propylbenzene	10.0	11.0	110	75-121	
Methyl tert-butyl ether	10.0	9.81	98	75-126	
sec-Butylbenzene	10.0	10.3	103	72-120	
Methylene Chloride	10.0	10.0	100	68-136	
o-Xylene	10.0	10.1	101	80-120	
Styrene	10.0	10.4	104	80-120	
Tetrachloroethene	10.0	10.0	100	80-123	
Toluene	10.0	10.6	106	80-121	
trans-1,2-Dichloroethene	10.0	11.2	112	80-123	
trans-1,3-Dichloropropene	10.0	10.2	102	65-120	
Trichloroethene	10.0	10.1	101	80-122	
Trichlorofluoromethane	10.0	12.4	124	56-161	
tert-Butylbenzene	10.0	10.2	102	78-120	
1,2-Dibromoethane	10.0	10.3	103	80-126	
Vinyl acetate	10.0	9.46	95	57-144	
Vinyl chloride	10.0	11.2	112	60-129	
tert-Butyl alcohol	100	101	101	47-137	
Xylenes, Total	20.0	20.7	104	80-120	
Dibromochloromethane	10.0	10.2	102	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7343.D

Lab ID: 240-68359-20 MS Client ID: MSA-SW41D-081516 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.51	95	66-130	
1,1,1-Trichloroethane	10.0	1.0 U	9.86	99	55-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	10.0	100	48-134	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	9.69	97	41-149	
1,1-Dichloroethane	10.0	1.0 U	10.3	103	57-135	
1,1-Dichloroethene	10.0	1.0 U	10.5	105	50-156	
1,1-Dichloropropene	10.0	1.0 U	9.42	94	55-136	
1,2,3-Trichlorobenzene	10.0	1.0 U	7.87	79	40-139	
1,2,3-Trichloropropane	10.0	1.0 U	9.98	100	54-141	
1,2,4-Trichlorobenzene	10.0	1.0 U	8.18	82	35-140	
1,2,4-Trimethylbenzene	10.0	1.0 U	9.55	95	54-128	
1,2-Dibromo-3-Chloropropane	10.0	5.0 U	8.96	90	37-139	
1,2-Dichlorobenzene	10.0	1.0 U	9.43	94	62-123	
1,2-Dichloroethane	10.0	1.0 U	9.44	94	62-137	
1,2-Dichloropropane	10.0	1.0 U	10.3	103	66-130	
1,3-Dichlorobenzene	10.0	1.0 U	9.42	94	59-122	
1,3-Dichloropropane	10.0	1.0 U	9.97	100	58-137	
1,4-Dichlorobenzene	10.0	1.0 U	9.26	93	60-122	
2,2-Dichloropropane	10.0	1.0 U	9.59	96	34-153	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-120	F1
2-Chlorotoluene	10.0	1.0 U	9.80	98	52-134	
2-Hexanone	20.0	5.0 U	17.2	86	41-135	
4-Chlorotoluene	10.0	1.0 U	9.70	97	52-133	
p-Isopropyltoluene	10.0	1.0 U	8.69	87	47-133	
Acetone	20.0	1.1 J	15.2	70	28-120	
Bromobenzene	10.0	1.0 U	9.73	97	59-131	
Benzene	10.0	1.0 U	9.98	100	67-126	
Bromoform	10.0	1.0 U	8.49	85	40-149	
Bromomethane	10.0	1.0 U	13.1	131	10-169	
Carbon disulfide	10.0	1.0 U	10.5	105	43-172	
Carbon tetrachloride	10.0	1.0 U	9.99	100	51-154	
Chlorobenzene	10.0	1.0 U	9.78	98	58-128	
Chloroethane	10.0	1.0 U	14.2	142	10-162	
Chloroform	10.0	1.0 U	10.1	101	67-133	
Chloromethane	10.0	1.0 U	10.4	104	30-143	
cis-1,2-Dichloroethene	10.0	0.34 J	10.4	100	64-134	
cis-1,3-Dichloropropene	10.0	1.0 U	9.73	97	58-120	
Bromochloromethane	10.0	1.0 U	9.88	99	70-130	
Dibromomethane	10.0	1.0 U	9.22	92	70-128	
Bromodichloromethane	10.0	1.0 U	9.56	96	64-127	
Dichlorodifluoromethane	10.0	1.0 U	9.29	93	16-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7343.D

Lab ID: 240-68359-20 MS Client ID: MSA-SW41D-081516 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Ethylbenzene	10.0	1.0 U	9.50	95	66-123	
Hexachlorobutadiene	10.0	1.0 U	8.19	82	30-134	
Isopropylbenzene	10.0	1.0 U	9.28	93	57-132	
m-Xylene & p-Xylene	10.0	2.0 U	9.69	97	58-127	
2-Butanone	20.0	5.0 U	16.4	82	38-123	
Naphthalene	10.0	1.0 U	8.77	88	28-150	
4-Methyl-2-pentanone	20.0	5.0 U	17.6	88	43-143	
n-Butylbenzene	10.0	1.0 U	8.31	83	38-133	
n-Propylbenzene	10.0	1.0 U	9.43	94	50-134	
Methyl tert-butyl ether	10.0	1.0 U	9.58	96	50-137	
sec-Butylbenzene	10.0	1.0 U	8.79	88	43-133	
Methylene Chloride	10.0	1.0 U	9.68	97	48-138	
o-Xylene	10.0	1.0 U	9.60	96	61-126	
Styrene	10.0	1.0 U	9.51	95	62-131	
Tetrachloroethene	10.0	1.0 U	9.04	90	54-138	
Toluene	10.0	1.0 U	10.0	100	63-130	
trans-1,2-Dichloroethene	10.0	1.0 U	10.6	106	70-137	
trans-1,3-Dichloropropene	10.0	1.0 U	9.34	93	48-120	
Trichloroethene	10.0	0.47 J	9.90	94	58-139	
Trichlorofluoromethane	10.0	1.0 U	10.8	108	26-175	
tert-Butylbenzene	10.0	1.0 U	9.01	90	48-131	
1,2-Dibromoethane	10.0	1.0 U	9.63	96	64-137	
Vinyl acetate	10.0	2.0 U	8.47	85	51-134	
Vinyl chloride	10.0	0.50 U	11.1	111	38-147	
tert-Butyl alcohol	100	20 U	94.0	94	70-130	
Xylenes, Total	20.0	2.0 U	19.3	96	60-126	
Dibromochloromethane	10.0	1.0 U	9.29	93	56-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7344.D

Lab ID: 240-68359-20 MSD Client ID: MSA-SW41D-081516 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	8.62	86	10	35	66-130	
1,1,1-Trichloroethane	10.0	9.44	94	4	35	55-150	
1,1,2,2-Tetrachloroethane	10.0	9.54	95	5	35	48-134	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.9	109	12	35	41-149	
1,1-Dichloroethane	10.0	9.36	94	9	35	57-135	
1,1-Dichloroethene	10.0	10.3	103	2	35	50-156	
1,1-Dichloropropene	10.0	9.15	91	3	35	55-136	
1,2,3-Trichlorobenzene	10.0	7.55	76	4	35	40-139	
1,2,3-Trichloropropane	10.0	9.29	93	7	35	54-141	
1,2,4-Trichlorobenzene	10.0	7.40	74	10	35	35-140	
1,2,4-Trimethylbenzene	10.0	8.48	85	12	35	54-128	
1,2-Dibromo-3-Chloropropane	10.0	9.15	91	2	35	37-139	
1,2-Dichlorobenzene	10.0	8.41	84	11	35	62-123	
1,2-Dichloroethane	10.0	8.54	85	10	35	62-137	
1,2-Dichloropropane	10.0	9.08	91	12	35	66-130	
1,3-Dichlorobenzene	10.0	8.26	83	13	35	59-122	
1,3-Dichloropropane	10.0	9.02	90	10	35	58-137	
1,4-Dichlorobenzene	10.0	8.21	82	12	35	60-122	
2,2-Dichloropropane	10.0	8.90	89	7	35	34-153	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	35	10-120	F1
2-Chlorotoluene	10.0	8.49	85	14	35	52-134	
2-Hexanone	20.0	16.6	83	4	35	41-135	
4-Chlorotoluene	10.0	8.60	86	12	35	52-133	
p-Isopropyltoluene	10.0	7.66	77	13	35	47-133	
Acetone	20.0	15.0	69	1	35	28-120	
Bromobenzene	10.0	8.49	85	14	35	59-131	
Benzene	10.0	9.12	91	9	31	67-126	
Bromoform	10.0	7.80	78	8	35	40-149	
Bromomethane	10.0	12.5	125	4	35	10-169	
Carbon disulfide	10.0	10.1	101	3	35	43-172	
Carbon tetrachloride	10.0	9.68	97	3	35	51-154	
Chlorobenzene	10.0	8.76	88	11	35	58-128	
Chloroethane	10.0	13.9	139	2	35	10-162	
Chloroform	10.0	9.15	91	10	35	67-133	
Chloromethane	10.0	9.69	97	7	35	30-143	
cis-1,2-Dichloroethene	10.0	9.57	92	8	35	64-134	
cis-1,3-Dichloropropene	10.0	8.54	85	13	35	58-120	
Bromochloromethane	10.0	9.02	90	9	35	70-130	
Dibromomethane	10.0	8.64	86	7	35	70-128	
Bromodichloromethane	10.0	8.44	84	12	35	64-127	
Dichlorodifluoromethane	10.0	11.1	111	18	35	16-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7344.D

Lab ID: 240-68359-20 MSD Client ID: MSA-SW41D-081516 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylbenzene	10.0	8.73	87	8	34	66-123	
Hexachlorobutadiene	10.0	7.54	75	8	35	30-134	
Isopropylbenzene	10.0	8.44	84	10	35	57-132	
m-Xylene & p-Xylene	10.0	8.99	90	7	35	58-127	
2-Butanone	20.0	15.1	76	8	35	38-123	
Naphthalene	10.0	9.02	90	3	35	28-150	
4-Methyl-2-pentanone	20.0	17.3	86	2	35	43-143	
n-Butylbenzene	10.0	7.47	75	11	35	38-133	
n-Propylbenzene	10.0	8.36	84	12	35	50-134	
Methyl tert-butyl ether	10.0	9.10	91	5	35	50-137	
sec-Butylbenzene	10.0	7.77	78	12	35	43-133	
Methylene Chloride	10.0	8.77	88	10	35	48-138	
o-Xylene	10.0	8.88	89	8	35	61-126	
Styrene	10.0	8.71	87	9	35	62-131	
Tetrachloroethene	10.0	8.39	84	7	35	54-138	
Toluene	10.0	9.69	97	4	33	63-130	
trans-1,2-Dichloroethene	10.0	9.94	99	7	25	70-137	
trans-1,3-Dichloropropene	10.0	8.38	84	11	35	48-120	
Trichloroethene	10.0	9.12	86	8	35	58-139	
Trichlorofluoromethane	10.0	11.8	118	9	35	26-175	
tert-Butylbenzene	10.0	7.99	80	12	35	48-131	
1,2-Dibromoethane	10.0	8.83	88	9	35	64-137	
Vinyl acetate	10.0	7.94	79	6	12	51-134	
Vinyl chloride	10.0	10.9	109	2	35	38-147	
tert-Butyl alcohol	100	91.5	91	3	35	70-130	
Xylenes, Total	20.0	17.9	89	8	35	60-126	
Dibromochloromethane	10.0	8.55	85	8	35	56-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: UXM7484.D Lab Sample ID: MB 240-243935/7

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

Instrument ID: A3UX16 Date Analyzed: 08/23/2016 18:58

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 240-243935/4	UXM7481.D	08/23/2016 17:51
MSA-SW42A-081516	240-68359-21	UXM7485.D	08/23/2016 19:21
MSA-SW42B-081516	240-68359-22	UXM7486.D	08/23/2016 19:44
MSA-SW42C-081516	240-68359-23	UXM7487.D	08/23/2016 20:06
MSA-SW42D-081516	240-68359-24	UXM7488.D	08/23/2016 20:29
MSA-SW43A-081516	240-68359-25	UXM7489.D	08/23/2016 20:52
MSA-SW43B-081516	240-68359-26	UXM7490.D	08/23/2016 21:15
MSA-SW43C-081516	240-68359-27	UXM7491.D	08/23/2016 21:38
MSA-SW43D-081516	240-68359-28	UXM7492.D	08/23/2016 22:01
MSA-SW44A-081516	240-68359-29	UXM7493.D	08/23/2016 22:23
MSA-SW44B-081516	240-68359-30	UXM7494.D	08/23/2016 22:46
MSA-SW44C-081516	240-68359-31	UXM7495.D	08/23/2016 23:08
MSA-SW44D-081516	240-68359-32	UXM7496.D	08/23/2016 23:31
MSA-SW45A-081516	240-68359-33	UXM7497.D	08/23/2016 23:53
MSA-SW45B-081516	240-68359-34	UXM7498.D	08/24/2016 00:16
MSA-SW45C-081516	240-68359-35	UXM7499.D	08/24/2016 00:39
MSA-SW45D-081516	240-68359-36	UXM7500.D	08/24/2016 01:02
EL-SW01A-081516	240-68359-37	UXM7501.D	08/24/2016 01:24
EL-SW01B-081516	240-68359-38	UXM7502.D	08/24/2016 01:47
EL-SW01C-081516	240-68359-39	UXM7503.D	08/24/2016 02:10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243935/7

Matrix: Water | Lab File ID: UXM7484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 18:58

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	1.29	J	5.0	0.94
108-86-1	Bromobenzene	1.0	U	1.0	0.35
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243935/7

Matrix: Water | Lab File ID: UXM7484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 18:58

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
78-93-3	2-Butanone	5.0	U	5.0	0.53
91-20-3	Naphthalene	1.0	U	1.0	0.45
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-243935/7

Matrix: Water Lab File ID: UXM7484.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/23/2016 18:58

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.: 243935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-132

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

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243935/7

Matrix: Water | Lab File ID: UXM7484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 18:58

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.: 243935 | Units: ug/L

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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-243935/7

Matrix: Water | Lab File ID: UXM7484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/23/2016 18:58

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.: 243935 | Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7481.D

Lab ID: LCS 240-243935/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.1	101	77-126	
1,1,1-Trichloroethane	20.0	21.8	109	79-133	
1,1,2,2-Tetrachloroethane	20.0	19.8	99	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	22.5	112	65-151	
1,1-Dichloroethane	20.0	22.3	112	77-121	
1,1-Dichloroethene	20.0	23.8	119	70-141	
1,1-Dichloropropene	20.0	20.6	103	80-120	
1,2,3-Trichlorobenzene	20.0	16.5	82	53-135	
1,2,3-Trichloropropane	20.0	18.8	94	65-135	
1,2,4-Trichlorobenzene	20.0	17.3	87	53-137	
1,2,4-Trimethylbenzene	20.0	22.4	112	77-120	
1,2-Dibromo-3-Chloropropane	20.0	18.3	91	46-140	
1,2-Dichlorobenzene	20.0	19.8	99	80-120	
1,2-Dichloroethane	20.0	17.9	90	76-130	
1,2-Dichloropropane	20.0	20.6	103	79-121	
1,3-Dichlorobenzene	20.0	20.2	101	80-120	
1,3-Dichloropropane	20.0	18.7	93	77-120	
1,4-Dichlorobenzene	20.0	20.0	100	80-120	
2,2-Dichloropropane	20.0	23.1	116	70-137	
2-Chloroethyl vinyl ether	20.0	17.4	87	51-138	
2-Chlorotoluene	20.0	22.3	112	76-120	
2-Hexanone	40.0	33.5	84	56-124	
4-Chlorotoluene	20.0	21.6	108	77-120	
p-Isopropyltoluene	20.0	21.4	107	75-120	
Acetone	40.0	31.9	80	46-120	
Bromobenzene	20.0	20.3	102	79-120	
Benzene	20.0	20.9	104	80-120	
Bromoform	20.0	18.0	90	52-157	
Bromomethane	20.0	29.4	147	24-160	
Carbon disulfide	20.0	26.1	130	58-160	
Carbon tetrachloride	20.0	22.9	114	69-149	
Chlorobenzene	20.0	20.3	102	80-120	
Chloroethane	20.0	36.3	181	24-147	*
Chloroform	20.0	20.9	104	80-120	
Chloromethane	20.0	20.8	104	50-135	
cis-1,2-Dichloroethene	20.0	21.3	106	80-120	
cis-1,3-Dichloropropene	20.0	19.8	99	75-120	
Bromochloromethane	20.0	19.3	96	77-125	
Dibromomethane	20.0	17.2	86	73-127	
Bromodichloromethane	20.0	18.8	94	76-125	
Dichlorodifluoromethane	20.0	14.4	72	32-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7481.D

Lab ID: LCS 240-243935/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	20.0	21.3	107	80-120	
Hexachlorobutadiene	20.0	21.2	106	55-134	
Isopropylbenzene	20.0	21.5	108	80-120	
m-Xylene & p-Xylene	20.0	21.9	109	80-120	
2-Butanone	40.0	30.8	77	54-122	
Naphthalene	20.0	18.0	90	39-148	
4-Methyl-2-pentanone	40.0	35.2	88	60-131	
n-Butylbenzene	20.0	21.4	107	66-120	
n-Propylbenzene	20.0	22.1	111	75-121	
Methyl tert-butyl ether	20.0	19.0	95	75-126	
sec-Butylbenzene	20.0	21.4	107	72-120	
Methylene Chloride	20.0	22.7	113	68-136	
o-Xylene	20.0	21.3	107	80-120	
Styrene	20.0	21.5	107	80-120	
Tetrachloroethene	20.0	18.8	94	80-123	
Toluene	20.0	20.8	104	80-121	
trans-1,2-Dichloroethene	20.0	23.9	119	80-123	
trans-1,3-Dichloropropene	20.0	18.9	95	65-120	
Trichloroethene	20.0	19.2	96	80-122	
Trichlorofluoromethane	20.0	25.5	127	56-161	
tert-Butylbenzene	20.0	21.0	105	78-120	
1,2-Dibromoethane	20.0	18.8	94	80-126	
Vinyl acetate	20.0	17.6	88	57-144	
Vinyl chloride	20.0	21.6	108	60-129	
tert-Butyl alcohol	200	173	86	47-137	
Xylenes, Total	40.0	43.2	108	80-120	
Dibromochloromethane	20.0	18.7	93	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: UXR4117.D Lab Sample ID: MB 240-244276/6

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

Instrument ID: A3UX17 Date Analyzed: 08/25/2016 12:01

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-244276/4	UXR4114.D	08/25/2016 10:54
MSA-SW49A-081516	240-68359-45	UXR4118.D	08/25/2016 12:28
MSA-SW40A-081516	240-68359-13	UXR4119.D	08/25/2016 12:50
MSA-SW40B-081516	240-68359-14	UXR4120.D	08/25/2016 13:12
MSA-SW41A-081516	240-68359-17	UXR4121.D	08/25/2016 13:34
MSA-SW41B-081516	240-68359-18	UXR4122.D	08/25/2016 13:56
TB-081516	240-68359-41	UXR4123.D	08/25/2016 14:18
MSA-SW46A-081516	240-68359-42	UXR4124.D	08/25/2016 14:40
MSA-SW47A-081516	240-68359-43	UXR4125.D	08/25/2016 15:02
MSA-SW48A-081516	240-68359-44	UXR4126.D	08/25/2016 15:25
MSA-SW49A-081516 MS	240-68359-45 MS	UXR4127.D	08/25/2016 15:48
MSA-SW49A-081516 MSD	240-68359-45 MSD	UXR4128.D	08/25/2016 16:10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244276/6

Matrix: Water | Lab File ID: UXR4117.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	5.0	U	5.0	0.94
108-86-1	Bromobenzene	1.0	U	1.0	0.35
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244276/6

Matrix: Water | Lab File ID: UXR4117.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
78-93-3	2-Butanone	5.0	U	5.0	0.53
91-20-3	Naphthalene	1.0	U	1.0	0.45
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244276/6

Matrix: Water | Lab File ID: UXR4117.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/25/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244276 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	84		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		63-132

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-244276/6

Matrix: Water Lab File ID: UXR4117.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/25/2016 12:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 244276 Units: ug/L

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-45-6	Chlorodifluoromethane TIC		1.0	U	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4114.D

Lab ID: LCS 240-244276/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.8	108	77-126	
1,1,1-Trichloroethane	10.0	11.8	118	79-133	
1,1,2,2-Tetrachloroethane	10.0	8.44	84	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.9	109	65-151	
1,1-Dichloroethane	10.0	9.03	90	77-121	
1,1-Dichloroethene	10.0	9.46	95	70-141	
1,1-Dichloropropene	10.0	9.71	97	80-120	
1,2,3-Trichlorobenzene	10.0	8.77	88	53-135	
1,2,3-Trichloropropane	10.0	9.57	96	65-135	
1,2,4-Trichlorobenzene	10.0	7.64	76	53-137	
1,2,4-Trimethylbenzene	10.0	9.11	91	77-120	
1,2-Dibromo-3-Chloropropane	10.0	9.84	98	46-140	
1,2-Dichlorobenzene	10.0	9.09	91	80-120	
1,2-Dichloroethane	10.0	11.1	111	76-130	
1,2-Dichloropropane	10.0	9.25	92	79-121	
1,3-Dichlorobenzene	10.0	9.01	90	80-120	
1,3-Dichloropropane	10.0	8.85	88	77-120	
1,4-Dichlorobenzene	10.0	9.17	92	80-120	
2,2-Dichloropropane	10.0	11.0	110	70-137	
2-Chloroethyl vinyl ether	10.0	8.79 J	88	51-138	
2-Chlorotoluene	10.0	8.57	86	76-120	
2-Hexanone	20.0	17.7	89	56-124	
4-Chlorotoluene	10.0	8.97	90	77-120	
p-Isopropyltoluene	10.0	9.13	91	75-120	
Acetone	20.0	16.9	85	46-120	
Bromobenzene	10.0	9.51	95	79-120	
Benzene	10.0	9.03	90	80-120	
Bromoform	10.0	12.4	124	52-157	
Bromomethane	10.0	14.7	147	24-160	
Carbon disulfide	10.0	9.25	92	58-160	
Carbon tetrachloride	10.0	12.8	128	69-149	
Chlorobenzene	10.0	9.18	92	80-120	
Chloroethane	10.0	6.84	68	24-147	
Chloroform	10.0	10.3	103	80-120	
Chloromethane	10.0	5.91	59	50-135	
cis-1,2-Dichloroethene	10.0	9.54	95	80-120	
cis-1,3-Dichloropropene	10.0	9.53	95	75-120	
Bromochloromethane	10.0	10.4	104	77-125	
Dibromomethane	10.0	10.4	104	73-127	
Bromodichloromethane	10.0	11.0	110	76-125	
Dichlorodifluoromethane	10.0	5.32	53	32-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4114.D

Lab ID: LCS 240-244276/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	10.0	9.20	92	80-120	
Hexachlorobutadiene	10.0	8.82	88	55-134	
Isopropylbenzene	10.0	9.82	98	80-120	
m-Xylene & p-Xylene	10.0	8.83	88	80-120	
2-Butanone	20.0	17.6	88	54-122	
Naphthalene	10.0	7.43	74	39-148	
4-Methyl-2-pentanone	20.0	19.4	97	60-131	
n-Butylbenzene	10.0	7.87	79	66-120	
n-Propylbenzene	10.0	8.90	89	75-121	
Methyl tert-butyl ether	10.0	10.3	103	75-126	
sec-Butylbenzene	10.0	8.67	87	72-120	
Methylene Chloride	10.0	9.63	96	68-136	
o-Xylene	10.0	9.28	93	80-120	
Styrene	10.0	9.60	96	80-120	
Tetrachloroethene	10.0	10.4	104	80-123	
Toluene	10.0	8.94	89	80-121	
trans-1,2-Dichloroethene	10.0	10.2	102	80-123	
trans-1,3-Dichloropropene	10.0	9.57	96	65-120	
Trichloroethene	10.0	10.5	105	80-122	
Trichlorofluoromethane	10.0	14.8	148	56-161	
tert-Butylbenzene	10.0	9.09	91	78-120	
1,2-Dibromoethane	10.0	10.1	101	80-126	
Vinyl acetate	10.0	8.81	88	57-144	
Vinyl chloride	10.0	7.70	77	60-129	
tert-Butyl alcohol	100	105	105	47-137	
Xylenes, Total	20.0	18.1	91	80-120	
Dibromochloromethane	10.0	10.7	107	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4127.D

Lab ID: 240-68359-45 MS Client ID: MSA-SW49A-081516 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	10.5	105	66-130	
1,1,1-Trichloroethane	10.0	1.0 U	11.8	118	55-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	8.00	80	48-134	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	11.1	111	41-149	
1,1-Dichloroethane	10.0	1.0 U	8.83	88	57-135	
1,1-Dichloroethene	10.0	1.0 U	9.41	94	50-156	
1,1-Dichloropropene	10.0	1.0 U	9.21	92	55-136	
1,2,3-Trichlorobenzene	10.0	1.0 U	6.89	69	40-139	
1,2,3-Trichloropropane	10.0	1.0 U	9.53	95	54-141	
1,2,4-Trichlorobenzene	10.0	1.0 U	6.74	67	35-140	
1,2,4-Trimethylbenzene	10.0	1.0 U	9.08	91	54-128	
1,2-Dibromo-3-Chloropropane	10.0	5.0 U	8.73	87	37-139	
1,2-Dichlorobenzene	10.0	1.0 U	9.04	90	62-123	
1,2-Dichloroethane	10.0	1.0 U	11.3	113	62-137	
1,2-Dichloropropane	10.0	1.0 U	8.92	89	66-130	
1,3-Dichlorobenzene	10.0	1.0 U	9.08	91	59-122	
1,3-Dichloropropane	10.0	1.0 U	8.61	86	58-137	
1,4-Dichlorobenzene	10.0	0.27 J	9.31	93	60-122	
2,2-Dichloropropane	10.0	1.0 U	11.0	110	34-153	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-120	F1
2-Chlorotoluene	10.0	1.0 U	8.71	87	52-134	
2-Hexanone	20.0	5.0 U	15.9	80	41-135	
4-Chlorotoluene	10.0	1.0 U	8.93	89	52-133	
p-Isopropyltoluene	10.0	1.0 U	9.14	91	47-133	
Acetone	20.0	5.0 U	14.9	75	28-120	
Bromobenzene	10.0	1.0 U	9.33	93	59-131	
Benzene	10.0	1.0 U	8.77	88	67-126	
Bromoform	10.0	1.0 U	11.8	118	40-149	
Bromomethane	10.0	1.0 U	13.3	133	10-169	
Carbon disulfide	10.0	1.0 U	9.24	92	43-172	
Carbon tetrachloride	10.0	1.0 U	12.8	128	51-154	
Chlorobenzene	10.0	1.0 U	9.21	92	58-128	
Chloroethane	10.0	1.0 U	6.31	63	10-162	
Chloroform	10.0	1.0 U	10.2	102	67-133	
Chloromethane	10.0	1.0 U	5.59	56	30-143	
cis-1,2-Dichloroethene	10.0	15	24.4	91	64-134	
cis-1,3-Dichloropropene	10.0	1.0 U	8.96	90	58-120	
Bromochloromethane	10.0	1.0 U	10.0	100	70-130	
Dibromomethane	10.0	1.0 U	10.2	102	70-128	
Bromodichloromethane	10.0	1.0 U	10.8	108	64-127	
Dichlorodifluoromethane	10.0	1.0 U	4.76	48	16-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4127.D

Lab ID: 240-68359-45 MS Client ID: MSA-SW49A-081516 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Ethylbenzene	10.0	1.0 U	9.31	93	66-123	
Hexachlorobutadiene	10.0	1.0 U	8.97	90	30-134	
Isopropylbenzene	10.0	1.0 U	9.70	97	57-132	
m-Xylene & p-Xylene	10.0	2.0 U	8.96	90	58-127	
2-Butanone	20.0	5.0 U	15.3	77	38-123	
Naphthalene	10.0	1.0 U	5.77	58	28-150	
4-Methyl-2-pentanone	20.0	5.0 U	17.9	90	43-143	
n-Butylbenzene	10.0	1.0 U	7.88	79	38-133	
n-Propylbenzene	10.0	1.0 U	9.18	92	50-134	
Methyl tert-butyl ether	10.0	1.0 U	9.64	96	50-137	
sec-Butylbenzene	10.0	1.0 U	8.56	86	43-133	
Methylene Chloride	10.0	1.0 U	8.85	89	48-138	
o-Xylene	10.0	1.0 U	9.06	91	61-126	
Styrene	10.0	1.0 U	9.55	95	62-131	
Tetrachloroethene	10.0	1.0 U	10.8	108	54-138	
Toluene	10.0	1.0 U	8.92	89	63-130	
trans-1,2-Dichloroethene	10.0	1.0 U	10.3	103	70-137	
trans-1,3-Dichloropropene	10.0	1.0 U	8.88	89	48-120	
Trichloroethene	10.0	11	20.6	100	58-139	
Trichlorofluoromethane	10.0	1.0 U	13.1	131	26-175	
tert-Butylbenzene	10.0	1.0 U	8.99	90	48-131	
1,2-Dibromoethane	10.0	1.0 U	9.79	98	64-137	
Vinyl acetate	10.0	2.0 U	8.07	81	51-134	
Vinyl chloride	10.0	7.5	14.4	68	38-147	
tert-Butyl alcohol	100	20 U	88.3	88	70-130	
Xylenes, Total	20.0	2.0 U	18.0	90	60-126	
Dibromochloromethane	10.0	1.0 U	10.6	106	56-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4128.D

Lab ID: 240-68359-45 MSD Client ID: MSA-SW49A-081516 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.7	107	2	35	66-130	
1,1,1-Trichloroethane	10.0	12.3	123	4	35	55-150	
1,1,2,2-Tetrachloroethane	10.0	8.25	83	3	35	48-134	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.7	117	5	35	41-149	
1,1-Dichloroethane	10.0	9.21	92	4	35	57-135	
1,1-Dichloroethene	10.0	9.69	97	3	35	50-156	
1,1-Dichloropropene	10.0	9.63	96	4	35	55-136	
1,2,3-Trichlorobenzene	10.0	8.52	85	21	35	40-139	
1,2,3-Trichloropropane	10.0	9.47	95	1	35	54-141	
1,2,4-Trichlorobenzene	10.0	7.61	76	12	35	35-140	
1,2,4-Trimethylbenzene	10.0	9.24	92	2	35	54-128	
1,2-Dibromo-3-Chloropropane	10.0	9.25	93	6	35	37-139	
1,2-Dichlorobenzene	10.0	9.22	92	2	35	62-123	
1,2-Dichloroethane	10.0	11.4	114	1	35	62-137	
1,2-Dichloropropane	10.0	8.99	90	1	35	66-130	
1,3-Dichlorobenzene	10.0	9.26	93	2	35	59-122	
1,3-Dichloropropane	10.0	8.76	88	2	35	58-137	
1,4-Dichlorobenzene	10.0	9.67	97	4	35	60-122	
2,2-Dichloropropane	10.0	11.8	118	6	35	34-153	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	35	10-120	F1
2-Chlorotoluene	10.0	8.84	88	1	35	52-134	
2-Hexanone	20.0	17.6	88	10	35	41-135	
4-Chlorotoluene	10.0	9.12	91	2	35	52-133	
p-Isopropyltoluene	10.0	9.17	92	0	35	47-133	
Acetone	20.0	15.9	80	6	35	28-120	
Bromobenzene	10.0	9.37	94	1	35	59-131	
Benzene	10.0	9.08	91	3	31	67-126	
Bromoform	10.0	12.3	123	4	35	40-149	
Bromomethane	10.0	15.6	156	16	35	10-169	
Carbon disulfide	10.0	9.68	97	5	35	43-172	
Carbon tetrachloride	10.0	12.9	129	1	35	51-154	
Chlorobenzene	10.0	9.34	93	1	35	58-128	
Chloroethane	10.0	7.60	76	19	35	10-162	
Chloroform	10.0	10.5	105	2	35	67-133	
Chloromethane	10.0	5.56	56	1	35	30-143	
cis-1,2-Dichloroethene	10.0	25.2	99	3	35	64-134	
cis-1,3-Dichloropropene	10.0	9.20	92	3	35	58-120	
Bromochloromethane	10.0	10.6	106	5	35	70-130	
Dibromomethane	10.0	10.5	105	3	35	70-128	
Bromodichloromethane	10.0	11.3	113	5	35	64-127	
Dichlorodifluoromethane	10.0	5.19	52	9	35	16-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4128.D

Lab ID: 240-68359-45 MSD Client ID: MSA-SW49A-081516 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylbenzene	10.0	9.33	93	0	34	66-123	
Hexachlorobutadiene	10.0	9.28	93	3	35	30-134	
Isopropylbenzene	10.0	10.1	101	4	35	57-132	
m-Xylene & p-Xylene	10.0	9.27	93	3	35	58-127	
2-Butanone	20.0	16.9	84	10	35	38-123	
Naphthalene	10.0	7.10	71	21	35	28-150	
4-Methyl-2-pentanone	20.0	18.9	95	5	35	43-143	
n-Butylbenzene	10.0	8.20	82	4	35	38-133	
n-Propylbenzene	10.0	9.14	91	0	35	50-134	
Methyl tert-butyl ether	10.0	10.2	102	6	35	50-137	
sec-Butylbenzene	10.0	8.67	87	1	35	43-133	
Methylene Chloride	10.0	9.15	92	3	35	48-138	
o-Xylene	10.0	9.63	96	6	35	61-126	
Styrene	10.0	9.91	99	4	35	62-131	
Tetrachloroethene	10.0	10.9	109	1	35	54-138	
Toluene	10.0	8.98	90	1	33	63-130	
trans-1,2-Dichloroethene	10.0	10.6	106	2	25	70-137	
trans-1,3-Dichloropropene	10.0	9.52	95	7	35	48-120	
Trichloroethene	10.0	20.9	103	1	35	58-139	
Trichlorofluoromethane	10.0	13.0	130	0	35	26-175	
tert-Butylbenzene	10.0	8.95	90	0	35	48-131	
1,2-Dibromoethane	10.0	10.1	101	3	35	64-137	
Vinyl acetate	10.0	8.65	87	7	12	51-134	
Vinyl chloride	10.0	15.6	81	9	35	38-147	
tert-Butyl alcohol	100	93.8	94	6	35	70-130	
Xylenes, Total	20.0	18.9	95	5	35	60-126	
Dibromochloromethane	10.0	10.6	106	1	35	56-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: UXR4147.D Lab Sample ID: MB 240-244438/7

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

Instrument ID: A3UX17 Date Analyzed: 08/26/2016 12:34

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 240-244438/4	UXR4144.D	08/26/2016 11:27
	LCSD 240-244438/5	UXR4145.D	08/26/2016 11:49
EL-SW01D-081516	240-68359-40	UXR4148.D	08/26/2016 12:56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244438/7

Matrix: Water | Lab File ID: UXR4147.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2016 12:34

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.: 244438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.45
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.30
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.45
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.42
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.37
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.44
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.47
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.32
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.82
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.25
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.23
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.25
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.19
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.19
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.27
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.26
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.59
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.40
591-78-6	2-Hexanone	5.0	U	5.0	0.48
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.29
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.43
67-64-1	Acetone	5.0	U	5.0	0.94
108-86-1	Bromobenzene	1.0	U	1.0	0.35
71-43-2	Benzene	1.0	U	1.0	0.35
75-25-2	Bromoform	1.0	U	1.0	0.56
74-83-9	Bromomethane	1.0	U	1.0	0.44
75-15-0	Carbon disulfide	1.0	U	1.0	0.38
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.43
108-90-7	Chlorobenzene	1.0	U	1.0	0.25
75-00-3	Chloroethane	1.0	U	1.0	0.32
67-66-3	Chloroform	1.0	U	1.0	0.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244438/7

Matrix: Water | Lab File ID: UXR4147.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2016 12:34

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.: 244438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.44
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.26
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.46
74-97-5	Bromochloromethane	1.0	U	1.0	0.50
74-95-3	Dibromomethane	1.0	U	1.0	0.42
75-27-4	Bromodichloromethane	1.0	U	1.0	0.29
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.32
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.35
108-20-3	Diisopropyl ether	5.0	U	5.0	0.50
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
78-93-3	2-Butanone	5.0	U	5.0	0.53
91-20-3	Naphthalene	1.0	U	1.0	0.45
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.99
104-51-8	n-Butylbenzene	1.0	U	1.0	0.31
103-65-1	n-Propylbenzene	1.0	U	1.0	0.40
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.48
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.25
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.30
100-42-5	Styrene	1.0	U	1.0	0.45
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.31
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.56
79-01-6	Trichloroethene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.49
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.41
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.32
108-05-4	Vinyl acetate	2.0	U	2.0	0.41
75-01-4	Vinyl chloride	0.50	U	0.50	0.29
75-65-0	tert-Butyl alcohol	20	U	20	4.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244438/7

Matrix: Water | Lab File ID: UXR4147.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/26/2016 12:34

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.: 244438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		73-124
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	84		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		63-132

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4144.D

Lab ID: LCS 240-244438/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.8	108	77-126	
1,1,1-Trichloroethane	10.0	11.4	114	79-133	
1,1,2,2-Tetrachloroethane	10.0	7.78	78	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.1	101	65-151	
1,1-Dichloroethane	10.0	8.85	88	77-121	
1,1-Dichloroethene	10.0	9.07	91	70-141	
1,1-Dichloropropene	10.0	9.20	92	80-120	
1,2,3-Trichlorobenzene	10.0	7.45	75	53-135	
1,2,3-Trichloropropane	10.0	9.34	93	65-135	
1,2,4-Trichlorobenzene	10.0	7.02	70	53-137	
1,2,4-Trimethylbenzene	10.0	8.68	87	77-120	
1,2-Dibromo-3-Chloropropane	10.0	8.08	81	46-140	
1,2-Dichlorobenzene	10.0	8.59	86	80-120	
1,2-Dichloroethane	10.0	11.1	111	76-130	
1,2-Dichloropropane	10.0	8.98	90	79-121	
1,3-Dichlorobenzene	10.0	8.66	87	80-120	
1,3-Dichloropropane	10.0	9.11	91	77-120	
1,4-Dichlorobenzene	10.0	8.67	87	80-120	
2,2-Dichloropropane	10.0	10.3	103	70-137	
2-Chloroethyl vinyl ether	10.0	8.46 J	85	51-138	
2-Chlorotoluene	10.0	8.37	84	76-120	
2-Hexanone	20.0	16.9	85	56-124	
4-Chlorotoluene	10.0	8.51	85	77-120	
p-Isopropyltoluene	10.0	8.75	88	75-120	
Acetone	20.0	14.0	70	46-120	
Bromobenzene	10.0	8.90	89	79-120	
Benzene	10.0	8.79	88	80-120	
Bromoform	10.0	12.2	122	52-157	
Bromomethane	10.0	15.4	154	24-160	
Carbon disulfide	10.0	8.75	88	58-160	
Carbon tetrachloride	10.0	12.1	121	69-149	
Chlorobenzene	10.0	9.27	93	80-120	
Chloroethane	10.0	6.76	68	24-147	
Chloroform	10.0	10.1	101	80-120	
Chloromethane	10.0	5.84	58	50-135	
cis-1,2-Dichloroethene	10.0	9.40	94	80-120	
cis-1,3-Dichloropropene	10.0	9.39	94	75-120	
Bromochloromethane	10.0	10.2	102	77-125	
Dibromomethane	10.0	10.2	102	73-127	
Bromodichloromethane	10.0	10.8	108	76-125	
Dichlorodifluoromethane	10.0	4.65	47	32-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4144.D

Lab ID: LCS 240-244438/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	10.0	9.28	93	80-120	
Hexachlorobutadiene	10.0	8.12	81	55-134	
Isopropylbenzene	10.0	9.85	99	80-120	
m-Xylene & p-Xylene	10.0	8.65	87	80-120	
2-Butanone	20.0	16.7	83	54-122	
Naphthalene	10.0	6.25	62	39-148	
4-Methyl-2-pentanone	20.0	18.4	92	60-131	
n-Butylbenzene	10.0	7.64	76	66-120	
n-Propylbenzene	10.0	8.49	85	75-121	
Methyl tert-butyl ether	10.0	9.92	99	75-126	
sec-Butylbenzene	10.0	8.14	81	72-120	
Methylene Chloride	10.0	9.05	90	68-136	
o-Xylene	10.0	9.36	94	80-120	
Styrene	10.0	9.63	96	80-120	
Tetrachloroethene	10.0	10.8	108	80-123	
Toluene	10.0	8.98	90	80-121	
trans-1,2-Dichloroethene	10.0	9.94	99	80-123	
trans-1,3-Dichloropropene	10.0	9.50	95	65-120	
Trichloroethene	10.0	9.92	99	80-122	
Trichlorofluoromethane	10.0	13.4	134	56-161	
tert-Butylbenzene	10.0	8.64	86	78-120	
1,2-Dibromoethane	10.0	10.3	103	80-126	
Vinyl acetate	10.0	8.87	89	57-144	
Vinyl chloride	10.0	7.60	76	60-129	
tert-Butyl alcohol	100	90.1	90	47-137	
Xylenes, Total	20.0	18.0	90	80-120	
Dibromochloromethane	10.0	10.4	104	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4145.D

Lab ID: LCSD 240-244438/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.5	105	2	35	77-126	
1,1,1-Trichloroethane	10.0	11.0	110	4	35	79-133	
1,1,2,2-Tetrachloroethane	10.0	8.44	84	8	35	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.86	99	3	35	65-151	
1,1-Dichloroethane	10.0	8.72	87	1	35	77-121	
1,1-Dichloroethene	10.0	9.16	92	1	35	70-141	
1,1-Dichloropropene	10.0	9.14	91	1	35	80-120	
1,2,3-Trichlorobenzene	10.0	8.59	86	14	35	53-135	
1,2,3-Trichloropropane	10.0	9.44	94	1	35	65-135	
1,2,4-Trichlorobenzene	10.0	7.67	77	9	35	53-137	
1,2,4-Trimethylbenzene	10.0	9.08	91	5	35	77-120	
1,2-Dibromo-3-Chloropropane	10.0	8.94	89	10	35	46-140	
1,2-Dichlorobenzene	10.0	9.12	91	6	35	80-120	
1,2-Dichloroethane	10.0	10.7	107	4	35	76-130	
1,2-Dichloropropane	10.0	8.98	90	0	35	79-121	
1,3-Dichlorobenzene	10.0	9.23	92	6	35	80-120	
1,3-Dichloropropane	10.0	8.95	90	2	35	77-120	
1,4-Dichlorobenzene	10.0	9.07	91	4	35	80-120	
2,2-Dichloropropane	10.0	10.5	105	2	35	70-137	
2-Chloroethyl vinyl ether	10.0	8.41 J	84	1	35	51-138	
2-Chlorotoluene	10.0	8.88	89	6	35	76-120	
2-Hexanone	20.0	16.9	85	0	35	56-124	
4-Chlorotoluene	10.0	9.07	91	6	35	77-120	
p-Isopropyltoluene	10.0	9.14	91	4	35	75-120	
Acetone	20.0	15.5	78	10	35	46-120	
Bromobenzene	10.0	9.35	93	5	35	79-120	
Benzene	10.0	8.68	87	1	35	80-120	
Bromoform	10.0	11.5	115	6	35	52-157	
Bromomethane	10.0	13.5	135	13	35	24-160	
Carbon disulfide	10.0	8.37	84	5	35	58-160	
Carbon tetrachloride	10.0	11.9	119	2	35	69-149	
Chlorobenzene	10.0	9.15	91	1	35	80-120	
Chloroethane	10.0	6.53	65	3	35	24-147	
Chloroform	10.0	10.1	101	1	35	80-120	
Chloromethane	10.0	5.55	56	5	35	50-135	
cis-1,2-Dichloroethene	10.0	9.56	96	2	35	80-120	
cis-1,3-Dichloropropene	10.0	9.40	94	0	35	75-120	
Bromochloromethane	10.0	9.90	99	3	35	77-125	
Dibromomethane	10.0	9.58	96	6	35	73-127	
Bromodichloromethane	10.0	10.6	106	2	35	76-125	
Dichlorodifluoromethane	10.0	4.52	45	3	35	32-140	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR4145.D

Lab ID: LCSD 240-244438/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethylbenzene	10.0	9.14	91	1	35	80-120	
Hexachlorobutadiene	10.0	9.53	95	16	35	55-134	
Isopropylbenzene	10.0	9.77	98	1	35	80-120	
m-Xylene & p-Xylene	10.0	8.69	87	0	35	80-120	
2-Butanone	20.0	16.1	81	3	35	54-122	
Naphthalene	10.0	7.10	71	13	35	39-148	
4-Methyl-2-pentanone	20.0	18.7	94	2	35	60-131	
n-Butylbenzene	10.0	8.02	80	5	35	66-120	
n-Propylbenzene	10.0	9.16	92	8	35	75-121	
Methyl tert-butyl ether	10.0	9.87	99	1	35	75-126	
sec-Butylbenzene	10.0	8.71	87	7	35	72-120	
Methylene Chloride	10.0	9.17	92	1	35	68-136	
o-Xylene	10.0	9.40	94	0	35	80-120	
Styrene	10.0	9.58	96	1	35	80-120	
Tetrachloroethene	10.0	10.4	104	4	35	80-123	
Toluene	10.0	8.90	89	1	35	80-121	
trans-1,2-Dichloroethene	10.0	9.67	97	3	35	80-123	
trans-1,3-Dichloropropene	10.0	9.40	94	1	35	65-120	
Trichloroethene	10.0	9.96	100	0	35	80-122	
Trichlorofluoromethane	10.0	13.2	132	1	35	56-161	
tert-Butylbenzene	10.0	9.14	91	6	35	78-120	
1,2-Dibromoethane	10.0	10.1	101	3	35	80-126	
Vinyl acetate	10.0	8.55	86	4	35	57-144	
Vinyl chloride	10.0	7.41	74	3	35	60-129	
tert-Butyl alcohol	100	96.1	96	6	35	47-137	
Xylenes, Total	20.0	18.1	90	0	35	80-120	
Dibromochloromethane	10.0	10.3	103	1	35	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

Vinyl Chloride only

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: UXC7738.D Lab Sample ID: MB 240-244648/6

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

Instrument ID: A3UX15 Date Analyzed: 08/29/2016 11:21

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 240-244648/4	UXC7735.D	08/29/2016 10:13
MSA-SW38A-081516	240-68359-5	UXC7741.D	08/29/2016 12:27
MSA-SW38B-081516	240-68359-6	UXC7742.D	08/29/2016 12:49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-244648/6

Matrix: Water | Lab File ID: UXC7738.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/29/2016 11:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 244648 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	0.50	U	0.50	0.29

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-132

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-244648/6

Matrix: Water Lab File ID: UXC7738.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/29/2016 11:21

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 244648 Units: ug/L

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.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC7735.D

Lab ID: LCS 240-244648/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	12.8	128	77-126	*
1,1,1-Trichloroethane	10.0	11.8	118	79-133	
1,1,2,2-Tetrachloroethane	10.0	9.11	91	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	13.3	133	65-151	
1,1-Dichloroethane	10.0	9.81	98	77-121	
1,1-Dichloroethene	10.0	11.4	114	70-141	
1,1-Dichloropropene	10.0	10.4	104	80-120	
1,2,3-Trichlorobenzene	10.0	13.1	131	53-135	
1,2,3-Trichloropropane	10.0	9.18	92	65-135	
1,2,4-Trichlorobenzene	10.0	13.2	132	53-137	
1,2,4-Trimethylbenzene	10.0	10.0	100	77-120	
1,2-Dibromo-3-Chloropropane	10.0	14.2	142	46-140	*
1,2-Dichlorobenzene	10.0	11.3	113	80-120	
1,2-Dichloroethane	10.0	9.92	99	76-130	
1,2-Dichloropropane	10.0	10.7	107	79-121	
1,3-Dichlorobenzene	10.0	10.7	107	80-120	
1,3-Dichloropropane	10.0	9.93	99	77-120	
1,4-Dichlorobenzene	10.0	10.7	107	80-120	
2,2-Dichloropropane	10.0	13.0	130	70-137	
2-Chloroethyl vinyl ether	10.0	10.0	100	51-138	
2-Chlorotoluene	10.0	10.1	101	76-120	
2-Hexanone	20.0	17.7	89	56-124	
4-Chlorotoluene	10.0	9.18	92	77-120	
p-Isopropyltoluene	10.0	11.4	114	75-120	
Acetone	20.0	14.5	72	46-120	
Bromobenzene	10.0	9.71	97	79-120	
Benzene	10.0	10.2	102	80-120	
Bromoform	10.0	13.6	136	52-157	
Bromomethane	10.0	4.84	48	24-160	
Carbon disulfide	10.0	10.6	106	58-160	
Carbon tetrachloride	10.0	13.9	139	69-149	
Chlorobenzene	10.0	10.7	107	80-120	
Chloroethane	10.0	3.38	34	24-147	
Chloroform	10.0	10.4	104	80-120	
Chloromethane	10.0	4.80	48	50-135	*
cis-1,2-Dichloroethene	10.0	10.7	107	80-120	
cis-1,3-Dichloropropene	10.0	12.1	121	75-120	*
Bromochloromethane	10.0	11.4	114	77-125	
Dibromomethane	10.0	10.7	107	73-127	
Bromodichloromethane	10.0	11.2	112	76-125	
Dichlorodifluoromethane	10.0	2.33	23	32-140	*

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC7735.D

Lab ID: LCS 240-244648/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	10.0	10.9	109	80-120	
Hexachlorobutadiene	10.0	12.2	122	55-134	
Isopropylbenzene	10.0	11.7	117	80-120	
m-Xylene & p-Xylene	10.0	10.4	104	80-120	
2-Butanone	20.0	16.9	84	54-122	
Naphthalene	10.0	13.3	133	39-148	
4-Methyl-2-pentanone	20.0	19.5	98	60-131	
n-Butylbenzene	10.0	11.2	112	66-120	
n-Propylbenzene	10.0	9.82	98	75-121	
Methyl tert-butyl ether	10.0	11.5	115	75-126	
sec-Butylbenzene	10.0	10.7	107	72-120	
Methylene Chloride	10.0	9.53	95	68-136	
o-Xylene	10.0	11.0	110	80-120	
Styrene	10.0	10.9	109	80-120	
Tetrachloroethene	10.0	11.4	114	80-123	
Toluene	10.0	10.7	107	80-121	
trans-1,2-Dichloroethene	10.0	11.1	111	80-123	
trans-1,3-Dichloropropene	10.0	11.8	118	65-120	
Trichloroethene	10.0	11.5	115	80-122	
Trichlorofluoromethane	10.0	9.11	91	56-161	
tert-Butylbenzene	10.0	10.7	107	78-120	
1,2-Dibromoethane	10.0	10.9	109	80-126	
Vinyl acetate	10.0	10.3	103	57-144	
Vinyl chloride	10.0	6.22	62	60-129	
tert-Butyl alcohol	100	127	127	47-137	
Xylenes, Total	20.0	21.4	107	80-120	
Dibromochloromethane	10.0	12.0	120	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

Vinyl Chloride only

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB619.D BFB Injection Date: 06/23/2016

Instrument ID: A3UX15 BFB Injection Time: 11:35

Analysis Batch No.: 235701

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.7	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	90.4	
175	5.0 - 9.0 % of mass 174	6.2	(6.8) 1
176	95.0 - 101.0 % of mass 174	87.8	(97.1) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-235701/2	UXC9008.D	06/23/2016	12:01
	STD8260 240-235701/3	UXC9009.D	06/23/2016	12:23
	STD8260 240-235701/4	UXC9010.D	06/23/2016	12:46
	STD8260 240-235701/5	UXC9011.D	06/23/2016	13:08
	STD8260 240-235701/6	UXC9012.D	06/23/2016	13:31
	STD8260 240-235701/7	UXC9013.D	06/23/2016	13:53
	ICV 240-235701/14	UXC9014.D	06/23/2016	14:16
	STD 240-235701/8	UXC9015.D	06/23/2016	14:38
	STD 240-235701/9	UXC9016.D	06/23/2016	15:00
	STD 240-235701/10	UXC9017.D	06/23/2016	15:22
	STD 240-235701/11	UXC9018.D	06/23/2016	15:45
	STD 240-235701/12	UXC9019.D	06/23/2016	16:07
	STD 240-235701/13	UXC9020.D	06/23/2016	16:30
	ICV 240-235701/15	UXC9021.D	06/23/2016	16:52

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 235701

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-235701/7	UXC9013.D
Level 2	STD8260 240-235701/6	UXC9012.D
Level 3	STD8260 240-235701/5	UXC9011.D
Level 4	STD8260 240-235701/4	UXC9010.D
Level 5	STD8260 240-235701/3	UXC9009.D
Level 6	STD8260 240-235701/2	UXC9008.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3321 0.3340	0.3168	0.3294	0.3233	0.3421	Ave		0.3296			0.1000	2.7		20.0			
Chloromethane	0.5208 0.4361	0.4774	0.4696	0.4288	0.4654	Ave		0.4664			0.1000	7.1		20.0			
Vinyl chloride	0.4391 0.4197	0.4151	0.4242	0.3962	0.4333	Ave		0.4213			0.1000	3.6		20.0			
Butadiene	0.4013 0.3963	0.3836	0.3985	0.3823	0.4088	Ave		0.3951				2.6		20.0			
Bromomethane	0.1340 0.1484	0.1393	0.1381	0.1229	0.1534	Ave		0.1393			0.0500	7.7		20.0			
Chloroethane	0.2365 0.2202	0.2232	0.2271	0.2108	0.2270	Ave		0.2241			0.0500	3.8		20.0			
Dichlorofluoromethane	0.5040 0.4904	0.5039	0.4975	0.4540	0.5047	Ave		0.4924				4.0		20.0			
Trichlorofluoromethane	0.2480 0.2661	0.2535	0.2474	0.2379	0.2614	Ave		0.2524			0.1000	4.1		20.0			
Ethyl ether	0.2476 0.2339	0.2449	0.2241	0.2370	0.2362	Ave		0.2373				3.5		20.0			
Acrolein	0.0273 0.0276	0.0269	0.0279	0.0278	0.0281	Ave		0.0276				1.5		20.0			
1,1-Dichloroethene	0.2949 0.3034	0.2936	0.2845	0.2901	0.3022	Ave		0.2948			0.1000	2.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2043 0.2209	0.2241	0.2068	0.1967	0.2302	Ave		0.2139			0.0500	6.1		20.0			
Acetone	0.1395 0.0726	0.1118	0.0878	0.0765	0.0741	Lin1	0.1478	0.0706			0.0100				1.0000		0.9900
Iodomethane	0.4298 0.4393	0.4742	0.4386	0.4552	0.4550	Ave		0.4487				3.6		20.0			
Carbon disulfide	0.8263 0.9010	0.8422	0.8083	0.8576	0.9046	Ave		0.8567			0.1000	4.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-235701/14 Calibration Date: 06/23/2016 14:16

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9014.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3296	0.3164	0.1000	0.00960	0.0100	-4.0	20.0
Chloromethane	Ave	0.4664	0.4448	0.1000	0.00954	0.0100	-4.6	20.0
Vinyl chloride	Ave	0.4213	0.4126	0.1000	0.00979	0.0100	-2.1	20.0
Butadiene	Ave	0.3951	0.3681		0.00932	0.0100	-6.8	30.0
Bromomethane	Ave	0.1393	0.1386	0.0500	0.00995	0.0100	-0.5	20.0
Chloroethane	Ave	0.2241	0.2155	0.0500	0.00962	0.0100	-3.8	20.0
Dichlorofluoromethane	Ave	0.4924	0.4860		0.00987	0.0100	-1.3	20.0
Trichlorofluoromethane	Ave	0.2524	0.2694	0.1000	0.0107	0.0100	6.8	20.0
Ethyl ether	Ave	0.2373	0.2405		0.0101	0.0100	1.4	20.0
Acrolein	Ave	0.0276	0.0413		0.0749	0.0500	49.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2139	0.2353	0.0500	0.0110	0.0100	10.0	20.0
1,1-Dichloroethene	Ave	0.2948	0.3180	0.1000	0.0108	0.0100	7.9	20.0
Acetone	Lin1		0.0617	0.0100	0.0154	0.0200	-23.0	50.0
Iodomethane	Ave	0.4487	0.5028		0.0112	0.0100	12.1	20.0
Carbon disulfide	Ave	0.8567	0.9472	0.1000	0.0111	0.0100	10.6	20.0
3-Chloro-1-propene	Ave	0.1674	0.1872		0.0112	0.0100	11.9	20.0
Methyl acetate	Ave	0.1562	0.1548	0.1000	0.0495	0.0500	-0.9	20.0
Methylene Chloride	Ave	0.3735	0.3544	0.1000	0.00949	0.0100	-5.1	50.0
2-Methyl-2-propanol	Ave	0.0095	0.0086		0.0907	0.100	-9.3	50.0
Acrylonitrile	Ave	0.0871	0.0893		0.103	0.100	2.6	20.0
Methyl tert-butyl ether	Ave	0.5780	0.6020	0.1000	0.0104	0.0100	4.1	20.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3457	0.1000	0.0108	0.0100	8.4	20.0
Hexane	Ave	0.0781	0.0849		0.0109	0.0100	8.7	20.0
1,1-Dichloroethane	Ave	0.5441	0.5576	0.2000	0.0102	0.0100	2.5	20.0
Vinyl acetate	Ave	0.3607	0.4002		0.0111	0.0100	10.9	50.0
2,2-Dichloropropane	Ave	0.1735	0.1819		0.0105	0.0100	4.8	20.0
cis-1,2-Dichloroethene	Ave	0.3431	0.3582	0.1000	0.0104	0.0100	4.4	20.0
2-Butanone (MEK)	Ave	0.1018	0.0930	0.0100	0.0183	0.0200	-8.6	20.0
Chlorobromomethane	Ave	0.1527	0.1581		0.0104	0.0100	3.6	20.0
Tetrahydrofuran	Ave	0.0568	0.0553		0.0195	0.0200	-2.6	20.0
Chloroform	Ave	0.5085	0.5370	0.2000	0.0106	0.0100	5.6	20.0
1,1,1-Trichloroethane	Ave	0.3093	0.3345	0.1000	0.0108	0.0100	8.1	20.0
Cyclohexane	Ave	0.5356	0.5820	0.1000	0.0109	0.0100	8.7	20.0
1,1-Dichloropropene	Ave	0.4235	0.4371		0.0103	0.0100	3.2	20.0
Carbon tetrachloride	Ave	0.2551	0.2760	0.1000	0.0108	0.0100	8.2	20.0
Isobutyl alcohol	Ave	0.0048	0.0045		0.231	0.250	-7.7	20.0
Benzene	Ave	1.297	1.346	0.5000	0.0104	0.0100	3.7	20.0
1,2-Dichloroethane	Ave	0.3701	0.3803	0.1000	0.0103	0.0100	2.8	20.0
n-Heptane	Ave	0.0709	0.0751		0.0106	0.0100	6.0	20.0
Trichloroethene	Ave	0.3242	0.3424	0.1500	0.0106	0.0100	5.6	20.0

Vinyl chloride only

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: UXC7589.D BFB Injection Date: 08/29/2016

Instrument ID: A3UX15 BFB Injection Time: 09:19

Analysis Batch No.: 244648

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.5	
75	30.0 - 60.0 % of mass 95	45.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	88.2	
175	5.0 - 9.0 % of mass 174	5.9	(6.7) 1
176	95.0 - 101.0 % of mass 174	85.9	(97.4) 1
177	5.0 - 9.0 % of mass 176	5.6	(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 240-244648/2	UXC7734.D	08/29/2016	09:51
	LCS 240-244648/4	UXC7735.D	08/29/2016	10:13
	CCV 240-244648/3	UXC7736.D	08/29/2016	10:36
	MB 240-244648/6	UXC7738.D	08/29/2016	11:21
MSA-SW38A-081516	240-68359-5	UXC7741.D	08/29/2016	12:27
MSA-SW38B-081516	240-68359-6	UXC7742.D	08/29/2016	12:49

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244648/2 Calibration Date: 08/29/2016 09:51

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC7734.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3296	0.2818	0.1000	0.00855	0.0100	-14.5	20.0
Chloromethane	Ave	0.4664	0.3403	0.1000	0.00730	0.0100	-27.0*	20.0
Vinyl chloride	Ave	0.4213	0.4135	0.1000	0.00982	0.0100	-1.8	20.0
Butadiene	Ave	0.3951	0.3682		0.00932	0.0100	-6.8	20.0
Bromomethane	Ave	0.1393	0.0856	0.0500	0.00615	0.0100	-38.5*	20.0
Chloroethane	Ave	0.2241	0.0571	0.0500	0.00255	0.0100	-74.5*	20.0
Dichlorofluoromethane	Ave	0.4924	0.4108		0.00834	0.0100	-16.6	20.0
Trichlorofluoromethane	Ave	0.2524	0.2776	0.1000	0.0110	0.0100	10.0	20.0
Ethyl ether	Ave	0.2373	0.2691		0.0113	0.0100	13.4	20.0
Acrolein	Ave	0.0276	0.0291		0.0527	0.0500	5.4	50.0
1,1-Dichloroethene	Ave	0.2948	0.3439	0.1000	0.0117	0.0100	16.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2139	0.2817	0.0500	0.0132	0.0100	31.7*	20.0
Acetone	Lin1		0.0668	0.0100	0.0168	0.0200	-15.9	50.0
Iodomethane	Ave	0.4487	0.5256		0.0117	0.0100	17.1	20.0
Carbon disulfide	Ave	0.8567	0.9287	0.1000	0.0108	0.0100	8.4	20.0
3-Chloro-1-propene	Ave	0.1674	0.1941		0.0116	0.0100	15.9	20.0
Methyl acetate	Ave	0.1562	0.1441	0.1000	0.0461	0.0500	-7.8	20.0
Methylene Chloride	Ave	0.3735	0.3675	0.1000	0.00984	0.0100	-1.6	50.0
2-Methyl-2-propanol	Ave	0.0095	0.0092		0.0970	0.100	-3.0	50.0
Methyl tert-butyl ether	Ave	0.5780	0.6844	0.1000	0.0118	0.0100	18.4	20.0
Acrylonitrile	Ave	0.0871	0.0815		0.0936	0.100	-6.4	20.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3578	0.1000	0.0112	0.0100	12.2	20.0
Hexane	Ave	0.0781	0.0833		0.0107	0.0100	6.7	20.0
1,1-Dichloroethane	Ave	0.5441	0.5689	0.2000	0.0105	0.0100	4.6	20.0
Vinyl acetate	Ave	0.3607	0.4155		0.0115	0.0100	15.2	50.0
2,2-Dichloropropane	Ave	0.1735	0.2171		0.0125	0.0100	25.1*	20.0
cis-1,2-Dichloroethene	Ave	0.3431	0.3858	0.1000	0.0112	0.0100	12.4	20.0
2-Butanone (MEK)	Ave	0.1018	0.0901	0.0100	0.0177	0.0200	-11.5	20.0
Chlorobromomethane	Ave	0.1527	0.1799		0.0118	0.0100	17.8	20.0
Tetrahydrofuran	Ave	0.0568	0.0560		0.0197	0.0200	-1.4	20.0
Chloroform	Ave	0.5085	0.5460	0.2000	0.0107	0.0100	7.4	20.0
1,1,1-Trichloroethane	Ave	0.3093	0.3598	0.1000	0.0116	0.0100	16.3	20.0
Cyclohexane	Ave	0.5356	0.5307	0.1000	0.00991	0.0100	-0.9	20.0
1,1-Dichloropropene	Ave	0.4235	0.4422		0.0104	0.0100	4.4	20.0
Carbon tetrachloride	Ave	0.2551	0.3426	0.1000	0.0134	0.0100	34.3*	20.0
Isobutyl alcohol	Ave	0.0048	0.0040		0.207	0.250	-17.1	20.0
Benzene	Ave	1.297	1.373	0.5000	0.0106	0.0100	5.8	20.0
1,2-Dichloroethane	Ave	0.3701	0.3776	0.1000	0.0102	0.0100	2.0	20.0
n-Heptane	Ave	0.0709	0.0770		0.0109	0.0100	8.6	20.0
Trichloroethene	Ave	0.3242	0.3713	0.1500	0.0115	0.0100	14.5	20.0

Appendix IX only

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB4865.D BFB Injection Date: 06/01/2016

Instrument ID: A3UX16 BFB Injection Time: 11:38

Analysis Batch No.: 232711

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
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	6.2	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	74.9	
175	5.0 - 9.0 % of mass 174	5.3	(7.1) 1
176	95.0 - 101.0 % of mass 174	73.3	(97.9) 1
177	5.0 - 9.0 % of mass 176	5.1	(7.0) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8269 240-232711/2	UXM5570.D	06/01/2016	12:06
	STD8260 240-232711/3	UXM5571.D	06/01/2016	12:29
	STD8260 240-232711/4	UXM5572.D	06/01/2016	12:51
	STD8260 240-232711/5	UXM5573.D	06/01/2016	13:14
	STD8260 240-232711/6	UXM5574.D	06/01/2016	13:37
	STD8260 240-232711/7	UXM5575.D	06/01/2016	14:00
	STD8260 240-232711/8	UXM5576.D	06/01/2016	14:22
	ICV 240-232711/9	UXM5577.D	06/01/2016	14:45
	STDA9 240-232711/10	UXM5578.D	06/01/2016	15:08
	STDA9 240-232711/11	UXM5579.D	06/01/2016	15:31
	STDA9 240-232711/12	UXM5580.D	06/01/2016	15:53
	STDA9 240-232711/13	UXM5581.D	06/01/2016	16:16
	STDA9 240-232711/14	UXM5582.D	06/01/2016	16:39
	STDA9 240-232711/15	UXM5583.D	06/01/2016	17:02
	ICV 240-232711/16	UXM5584.D	06/01/2016	17:24

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 232711

SDG No.:

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

Calibration Start Date: 06/01/2016 15:08 Calibration End Date: 06/01/2016 17:02 Calibration ID: 34646

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-232711/15	UXM5583.D
Level 2	STDA9 240-232711/14	UXM5582.D
Level 3	STDA9 240-232711/13	UXM5581.D
Level 4	STDA9 240-232711/12	UXM5580.D
Level 5	STDA9 240-232711/11	UXM5579.D
Level 6	STDA9 240-232711/10	UXM5578.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	0.0219 0.0227	0.0236	0.0231	0.0222	0.0233	Ave		0.0228				2.9		20.0			
Diisopropyl ether	0.2567 0.2470	0.2555	0.2457	0.2444	0.2481	Ave		0.2496				2.1		20.0			
2-Chloro-1,3-butadiene	0.4419 0.4304	0.4401	0.4214	0.4247	0.4312	Ave		0.4316				1.9		20.0			
Ethyl-t-butyl ether (ETBE)	0.8535 0.8559	0.8480	0.8338	0.8284	0.8446	Ave		0.8440				1.3		20.0			
Propionitrile	0.0298 0.0285	0.0311	0.0280	0.0266	0.0275	Ave		0.0286				5.7		20.0			
Ethyl acetate	0.1618 0.1666	0.1876	0.1652	0.1643	0.1648	Ave		0.1684				5.7		20.0			
Methacrylonitrile	0.1264 0.1349	0.1281	0.1286	0.1255	0.1306	Ave		0.1290				2.6		20.0			
Tert-amyl-methyl ether (TAME)	0.7743 0.7955	0.7867	0.7558	0.7613	0.7797	Ave		0.7756				1.9		20.0			
n-Butanol	0.0046 0.0049	0.0055	0.0049	0.0045	0.0048	Ave		0.0049				7.5		20.0			
Ethyl acrylate	0.2850 0.2509	0.2581	0.2455	0.2442	0.2477	Ave		0.2552				6.0		20.0			
Methyl methacrylate	0.1837 0.1819	0.1841	0.1743	0.1782	0.1814	Ave		0.1806				2.1		20.0			
2-Nitropropane	0.0709 0.0601	0.0671	0.0619	0.0611	0.0601	Ave		0.0636				7.0		20.0			
n-Butyl acetate	0.3300 0.2892	0.3010	0.2786	0.2867	0.2888	Ave		0.2957				6.2		20.0			
1-Chlorohexane	0.4957 0.4658	0.4857	0.4616	0.4661	0.4839	Ave		0.4765				2.9		20.0			
Cyclohexanone	0.0264 0.0163	0.0188	0.0174	0.0167	0.0159	Lin1	0.0880	0.0158							0.9990		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.: 240-68359-1 Analy Batch No.: 232711

SDG No.:

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

Calibration Start Date: 06/01/2016 15:08 Calibration End Date: 06/01/2016 17:02 Calibration ID: 34646

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								
1,2,3-Trimethylbenzene	2.9874 3.0603	2.9348	2.9599	2.9037	3.0152	Ave		2.9769				1.9		20.0			
1,3,5-Trichlorobenzene	0.9939 0.9954	0.9855	1.0342	0.9722	0.9924	Ave		0.9956				2.1		20.0			
2-Methylnaphthalene	1.4671 1.3856	1.4401	1.4386	1.3682	1.3947	Ave		1.4157				2.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-232711/16 Calibration Date: 06/01/2016 17:24

Instrument ID: A3UX16 Calib Start Date: 06/01/2016 15:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2016 17:02

Lab File ID: UXM5584.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	0.0228	0.0233		0.102	0.100	2.0	20.0
Diisopropyl ether	Ave	0.2496	0.2758		0.0110	0.0100	10.5	20.0
2-Chloro-1,3-butadiene	Ave	0.4316	0.4683		0.0109	0.0100	8.5	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8440	0.9047		0.0107	0.0100	7.2	20.0
Propionitrile	Ave	0.0286	0.0300		0.105	0.100	4.9	20.0
Ethyl acetate	Ave	0.1684	0.1820		0.0216	0.0200	8.1	50.0
Methacrylonitrile	Ave	0.1290	0.1351		0.105	0.100	4.7	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7756	0.8251		0.0106	0.0100	6.4	20.0
n-Butanol	Ave	0.0049	0.0047		0.240	0.250	-4.0	20.0
Methyl methacrylate	Ave	0.1806	0.1852		0.0205	0.0200	2.5	20.0
2-Nitropropane	Ave	0.0636	0.0608		0.0191	0.0200	-4.4	20.0
1-Chlorohexane	Ave	0.4765	0.4839		0.0102	0.0100	1.6	20.0
Cyclohexanone	Lin1		0.0159		0.0945	0.100	-5.5	20.0
1,2,3-Trimethylbenzene	Ave	2.977	3.064		0.0103	0.0100	2.9	20.0
1,3,5-Trichlorobenzene	Ave	0.996	1.031		0.0104	0.0100	3.5	20.0
2-Methylnaphthalene	Ave	1.416	1.326		0.0187	0.0200	-6.4	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB4924.D BFB Injection Date: 07/26/2016

Instrument ID: A3UX16 BFB Injection Time: 09:27

Analysis Batch No.: 239770

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.2	
75	30.0 - 60.0 % of mass 95	45.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	6.1	(7.6) 1
176	95.0 - 101.0 % of mass 174	79.2	(98.0) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-239770/6	UXM6775.D	07/26/2016	12:02
	STD8260 240-239770/7	UXM6776.D	07/26/2016	12:25
	STD8260 240-239770/8	UXM6777.D	07/26/2016	12:47
	ICIS 240-239770/9	UXM6778.D	07/26/2016	13:10
	STD8260 240-239770/10	UXM6779.D	07/26/2016	13:32
	STD8260 240-239770/11	UXM6780.D	07/26/2016	13:55
	ICV 240-239770/12	UXM6781.D	07/26/2016	14:18

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 239770

SDG No.:

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

Calibration Start Date: 07/26/2016 12:02 Calibration End Date: 07/26/2016 13:55 Calibration ID: 35356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-239770/6	UXM6775.D
Level 2	STD8260 240-239770/7	UXM6776.D
Level 3	STD8260 240-239770/8	UXM6777.D
Level 4	ICIS 240-239770/9	UXM6778.D
Level 5	STD8260 240-239770/10	UXM6779.D
Level 6	STD8260 240-239770/11	UXM6780.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	0.2550 0.2333	0.2660	0.2692	0.2515	0.2027	Ave		0.2463			0.1000	10.1		20.0			
Chloromethane	0.3497 0.3424	0.3143	0.3509	0.3344	0.3487	Ave		0.3400			0.1000	4.1		20.0			
Vinyl chloride	0.3294 0.3206	0.2992	0.3386	0.3323	0.3292	Ave		0.3249			0.1000	4.3		20.0			
Butadiene	0.3363 0.2867	0.3106	0.3195	0.3062	0.2686	Ave		0.3046				7.9		20.0			
Bromomethane	0.1127 0.1135	0.1293	0.1233	0.1191	0.1207	Ave		0.1198			0.0500	5.2		20.0			
Chloroethane	0.0953 0.1051	0.1185	0.1021	0.1157	0.1060	Ave		0.1071			0.0500	8.1		20.0			
Dichlorofluoromethane	0.3798 0.3230	0.3559	0.3332	0.3397	0.3318	Ave		0.3439				6.0		20.0			
Trichlorofluoromethane	0.2417 0.2562	0.2519	0.2624	0.2727	0.2347	Ave		0.2533			0.1000	5.4		20.0			
Ethyl ether	0.2135 0.2002	0.1936	0.2046	0.1942	0.2061	Ave		0.2021				3.8		20.0			
Acrolein	0.0349 0.0282	0.0319	0.0287	0.0278	0.0302	Ave		0.0303				9.0		20.0			
1,1-Dichloroethene	0.2526 0.2525	0.2359	0.2735	0.2480	0.2654	Ave		0.2546			0.1000	5.2		20.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1827 0.1733	0.1654	0.1989	0.1801	0.1879	Ave		0.1814			0.0500	6.4		20.0			
Acetone	+++++ 0.0524	0.0820	0.0608	0.0538	0.0561	Ave		0.0610			0.0100	19.9		20.0			
Iodomethane	0.3678 0.4158	0.3740	0.4070	0.4102	0.4200	Ave		0.3991				5.6		20.0			
Carbon disulfide	0.8259 0.8578	0.7541	0.8704	0.8345	0.8789	Ave		0.8369			0.1000	5.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 239770

SDG No.:

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

Calibration Start Date: 07/26/2016 12:02 Calibration End Date: 07/26/2016 13:55 Calibration ID: 35356

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	0.1274 0.1707	0.1168	0.1563	0.1597	0.1690	Ave		0.1500				15.0		20.0			
Methyl acetate	0.1227 0.1158	0.1180	0.1202	0.1136	0.1224	Ave		0.1188			0.1000	3.1		20.0			
Methylene Chloride	+++++ 0.2950	0.5912	0.3373	0.3112	0.3056	Lin1	0.2937	0.2873			0.1000				1.0000		0.9900
tert-Butyl alcohol	0.0140 0.0130	0.0132	0.0131	0.0127	0.0137	Ave		0.0133				3.6		20.0			
Acrylonitrile	0.0653 0.0628	0.0594	0.0638	0.0621	0.0661	Ave		0.0633				3.8		20.0			
trans-1,2-Dichloroethene	0.2797 0.2942	0.2609	0.3065	0.2903	0.3048	Ave		0.2894			0.1000	5.9		20.0			
Methyl tert-butyl ether	0.6796 0.6519	0.6279	0.6570	0.6355	0.6732	Ave		0.6542			0.1000	3.1		20.0			
Hexane	0.0623 0.0634	0.0594	0.0677	0.0644	0.0662	Ave		0.0639				4.6		20.0			
1,1-Dichloroethane	0.4779 0.5278	0.4775	0.5337	0.5197	0.5361	Ave		0.5121			0.2000	5.3		20.0			
Vinyl acetate	0.3237 0.3439	0.3182	0.3422	0.3330	0.3489	Ave		0.3350				3.6		20.0			
cis-1,2-Dichloroethene	0.3104 0.3206	0.3026	0.3284	0.3188	0.3330	Ave		0.3190			0.1000	3.5		20.0			
2,2-Dichloropropane	0.3198 0.3401	0.3232	0.3548	0.3553	0.3588	Ave		0.3420				5.0		20.0			
2-Butanone	0.0757 0.0644	0.0602	0.0667	0.0633	0.0699	Ave		0.0667			0.0100	8.2		20.0			
Bromochloromethane	0.1246 0.1321	0.1241	0.1329	0.1312	0.1369	Ave		0.1303				3.8		20.0			
Tetrahydrofuran	0.0522 0.0434	0.0459	0.0428	0.0431	0.0448	Ave		0.0454				7.8		20.0			
Chloroform	0.4475 0.4767	0.4305	0.4846	0.4672	0.4854	Ave		0.4653			0.2000	4.7		20.0			
1,1,1-Trichloroethane	0.3738 0.3701	0.3472	0.3826	0.3680	0.3839	Ave		0.3709			0.1000	3.6		20.0			
Cyclohexane	0.4575 0.4389	0.4545	0.4869	0.4552	0.4720	Ave		0.4608			0.1000	3.6		20.0			
1,1-Dichloropropene	0.3682 0.3856	0.3383	0.3925	0.3787	0.3905	Ave		0.3756				5.4		20.0			
Carbon tetrachloride	0.2796 0.3090	0.2771	0.3229	0.3054	0.3263	Ave		0.3034			0.1000	6.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 239770

SDG No.:

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

Calibration Start Date: 07/26/2016 12:02 Calibration End Date: 07/26/2016 13:55 Calibration ID: 35356

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	0.0050 0.0039	0.0044	0.0042	0.0041	0.0043	Ave		0.0043				8.5		20.0			
Benzene	1.1686 1.2100	1.0808	1.1935	1.1582	1.1940	Ave		1.1675			0.5000	4.0		20.0			
1,2-Dichloroethane	0.2946 0.3037	0.2872	0.3107	0.3007	0.3103	Ave		0.3012			0.1000	3.0		20.0			
n-Heptane	+++++ 0.1351	0.4414	0.1936	0.1592	0.1466	Lin1	0.3154	0.1285							1.0000		0.9900
Trichloroethene	0.2776 0.2892	0.2581	0.2987	0.2765	0.2917	Ave		0.2820			0.1500	5.1		20.0			
Methylcyclohexane	0.4242 0.4150	0.4276	0.4614	0.4255	0.4477	Ave		0.4336			0.1000	4.0		20.0			
1,2-Dichloropropane	0.2694 0.2628	0.2481	0.2584	0.2529	0.2639	Ave		0.2593			0.1000	3.0		20.0			
Dibromomethane	0.1169 0.1201	0.1152	0.1224	0.1171	0.1229	Ave		0.1191				2.7		20.0			
1,4-Dioxane	0.0011 0.0014	0.0016	0.0013	0.0013	0.0015	Ave		0.0014				11.8		20.0			
Bromodichloromethane	0.2843 0.3145	0.2656	0.3043	0.3025	0.3118	Ave		0.2972			0.1500	6.3		20.0			
2-Chloroethyl vinyl ether	0.0821 0.0970	0.0861	0.0998	0.0919	0.1010	Ave		0.0930				8.2		20.0			
cis-1,3-Dichloropropene	0.3272 0.3763	0.3042	0.3678	0.3573	0.3790	Ave		0.3520			0.1500	8.5		20.0			
4-Methyl-2-pentanone	0.1492 0.1322	0.1394	0.1401	0.1352	0.1414	Ave		0.1396			0.0500	4.2		20.0			
Toluene	1.5607 1.6827	1.4730	1.6108	1.6080	1.6416	Ave		1.5961			0.4000	4.5		20.0			
trans-1,3-Dichloropropene	0.3711 0.4197	0.3722	0.4087	0.4069	0.4229	Ave		0.4003			0.1000	5.7		20.0			
Ethyl methacrylate	0.3658 0.3201	0.3210	0.3348	0.3149	0.3328	Ave		0.3316				5.6		20.0			
1,1,2-Trichloroethane	0.2517 0.2337	0.2441	0.2290	0.2338	0.2398	Ave		0.2387			0.1000	3.5		20.0			
Tetrachloroethene	0.3107 0.2891	0.2764	0.3007	0.2830	0.2923	Ave		0.2920			0.1500	4.2		20.0			
1,3-Dichloropropane	0.4467 0.4350	0.4226	0.4424	0.4383	0.4469	Ave		0.4386				2.1		20.0			
2-Hexanone	0.1635 0.1256	0.1326	0.1359	0.1316	0.1411	Ave		0.1384			0.0500	9.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 239770

SDG No.:

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

Calibration Start Date: 07/26/2016 12:02 Calibration End Date: 07/26/2016 13:55 Calibration ID: 35356

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								
Dibromochloromethane	0.2183 0.2698	0.2349	0.2544	0.2541	0.2704	Ave		0.2503				8.2		20.0			
1,2-Dibromoethane	0.2186 0.2210	0.2052	0.2197	0.2210	0.2318	Ave		0.2195				3.9		20.0			
Chlorobenzene	0.9947 1.0203	0.9354	1.0273	0.9977	1.0250	Ave		1.0001			0.3000	3.5		20.0			
1,1,1,2-Tetrachloroethane	0.3452 0.3817	0.3203	0.3557	0.3591	0.3659	Ave		0.3547				5.8		20.0			
Ethylbenzene	0.5162 0.5678	0.4974	0.5583	0.5499	0.5721	Ave		0.5436				5.5		20.0			
m-Xylene & p-Xylene	0.6234 0.7033	0.5935	0.6999	0.6717	0.7079	Ave		0.6666				7.2		20.0			
o-Xylene	0.6231 0.7439	0.6234	0.7338	0.7134	0.7477	Ave		0.6975				8.4		20.0			
Styrene	1.0003 1.1443	0.9577	1.0779	1.0796	1.1590	Ave		1.0698			0.3000	7.4		20.0			
Bromoform	0.1204 0.1392	0.1141	0.1272	0.1238	0.1366	Ave		0.1269			0.1000	7.6		20.0			
Isopropylbenzene	1.5878 1.8812	1.5542	1.8187	1.7573	1.8538	Ave		1.7422			0.1000	8.0		20.0			
1,1,2,2-Tetrachloroethane	0.5474 0.5050	0.4680	0.4937	0.5136	0.5279	Ave		0.5093			0.3000	5.4		20.0			
Bromobenzene	0.6744 0.7605	0.6986	0.7671	0.7471	0.7688	Ave		0.7361				5.4		20.0			
1,2,3-Trichloropropane	0.1732 0.1499	0.1276	0.1574	0.1528	0.1570	Ave		0.1530				9.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1036	0.0941	0.0940	0.0966	0.0992	Ave		0.0975				4.1		20.0			
n-Propylbenzene	0.8091 0.9003	0.7761	0.8792	0.8845	0.9287	Ave		0.8630				6.7		20.0			
2-Chlorotoluene	0.7121 0.7927	0.6779	0.7829	0.7797	0.8111	Ave		0.7594				6.9		20.0			
1,3,5-Trimethylbenzene	2.4382 2.9403	2.3646	2.7887	2.8403	2.9113	Ave		2.7139				9.2		20.0			
4-Chlorotoluene	0.7187 0.8121	0.6862	0.8078	0.7846	0.8143	Ave		0.7706				7.1		20.0			
tert-Butylbenzene	1.9653 2.4781	1.9640	2.3895	2.3315	2.4338	Ave		2.2604				10.4		20.0			
1,2,4-Trimethylbenzene	2.5413 3.0545	2.5118	2.9135	2.8956	3.0453	Ave		2.8270				8.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 239770

SDG No.:

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

Calibration Start Date: 07/26/2016 12:02 Calibration End Date: 07/26/2016 13:55 Calibration ID: 35356

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.8261 3.4032	2.6823	3.3437	3.2554	3.4241	Ave		3.1558				10.1		20.0			
1,3-Dichlorobenzene	1.4854 1.5150	1.3491	1.5094	1.4769	1.5230	Ave		1.4765			0.6000	4.4		20.0			
p-Isopropyltoluene	2.4972 3.0185	2.4472	2.9300	2.8744	3.0311	Ave		2.7997				9.3		20.0			
1,4-Dichlorobenzene	1.5911 1.5080	1.3773	1.5231	1.4778	1.5080	Ave		1.4975			0.5000	4.7		20.0			
n-Butylbenzene	2.1636 2.4550	1.9879	2.4344	2.3735	2.4767	Ave		2.3152				8.5		20.0			
1,2-Dichlorobenzene	1.3733 1.4285	1.2950	1.4492	1.4381	1.4488	Ave		1.4055			0.4000	4.3		20.0			
1,2-Dibromo-3-Chloropropane	0.0577 0.0818	0.0597	0.0717	0.0805	0.0799	Ave		0.0719			0.0500	15.1		20.0			
1,2,4-Trichlorobenzene	0.8717 0.8081	0.7077	0.7787	0.8000	0.8519	Ave		0.8030			0.2000	7.2		20.0			
Hexachlorobutadiene	0.3597 0.3433	0.3016	0.3528	0.3425	0.3525	Ave		0.3421				6.1		20.0			
Naphthalene	1.3547 1.2380	1.0259	1.1456	1.2296	1.3095	Ave		1.2172				9.7		20.0			
1,2,3-Trichlorobenzene	0.6293 0.5589	0.5074	0.5467	0.5792	0.5930	Ave		0.5691				7.3		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2481	0.2251	0.2484	0.2387	0.2487	Ave		0.2416				3.8		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2535	0.2341	0.2560	0.2482	0.2579	Ave		0.2531				4.6		20.0			
Toluene-d8 (Surr)	+++++ 1.4573	1.2534	1.4207	1.3937	1.4077	Ave		1.3876				5.0		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.5155	0.4670	0.5103	0.4823	0.5131	Ave		0.5150				9.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-239770/12 Calibration Date: 07/26/2016 14:18

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM6781.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	0.2463	0.2574	0.1000	0.0105	0.0100	4.5	20.0
Chloromethane	Ave	0.3400	0.3682	0.1000	0.0108	0.0100	8.3	20.0
Vinyl chloride	Ave	0.3249	0.3466	0.1000	0.0107	0.0100	6.7	20.0
Butadiene	Ave	0.3046	0.3086		0.0101	0.0100	1.3	30.0
Bromomethane	Ave	0.1198	0.1425	0.0500	0.0119	0.0100	19.0	20.0
Chloroethane	Ave	0.1071	0.1322	0.0500	0.0123	0.0100	23.5*	20.0
Dichlorofluoromethane	Ave	0.3439	0.3800		0.0110	0.0100	10.5	20.0
Trichlorofluoromethane	Ave	0.2533	0.2983	0.1000	0.0118	0.0100	17.8	20.0
Ethyl ether	Ave	0.2021	0.2020		0.0100	0.0100	-0.0	20.0
Acrolein	Ave	0.0303	0.0285		0.0469	0.0500	-6.1	50.0
1,1-Dichloroethene	Ave	0.2546	0.2701	0.1000	0.0106	0.0100	6.1	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1814	0.1953	0.0500	0.0108	0.0100	7.7	20.0
Acetone	Ave	0.0610	0.0495	0.0100	0.0162	0.0200	-18.9	50.0
Iodomethane	Ave	0.3991	0.4456		0.0112	0.0100	11.7	20.0
Carbon disulfide	Ave	0.8369	0.9131	0.1000	0.0109	0.0100	9.1	20.0
3-Chloro-1-propene	Ave	0.1500	0.1696		0.0113	0.0100	13.1	20.0
Methyl acetate	Ave	0.1188	0.1195	0.1000	0.0503	0.0500	0.6	20.0
Methylene Chloride	Lin1		0.3099	0.1000	0.00977	0.0100	-2.3	50.0
tert-Butyl alcohol	Ave	0.0133	0.0141		0.106	0.100	6.4	50.0
Acrylonitrile	Ave	0.0633	0.0641		0.101	0.100	1.3	20.0
Methyl tert-butyl ether	Ave	0.6542	0.6634	0.1000	0.0101	0.0100	1.4	20.0
trans-1,2-Dichloroethene	Ave	0.2894	0.3057	0.1000	0.0106	0.0100	5.6	20.0
Hexane	Ave	0.0639	0.0726		0.0114	0.0100	13.7	20.0
1,1-Dichloroethane	Ave	0.5121	0.5094	0.2000	0.00995	0.0100	-0.5	20.0
Vinyl acetate	Ave	0.3350	0.3293		0.00983	0.0100	-1.7	50.0
2,2-Dichloropropane	Ave	0.3420	0.3442		0.0101	0.0100	0.6	20.0
2-Butanone	Ave	0.0667	0.0655	0.0100	0.0196	0.0200	-1.8	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.3249	0.1000	0.0102	0.0100	1.8	20.0
Bromochloromethane	Ave	0.1303	0.1313		0.0101	0.0100	0.8	20.0
Tetrahydrofuran	Ave	0.0454	0.0439		0.0193	0.0200	-3.3	20.0
Chloroform	Ave	0.4653	0.4717	0.2000	0.0101	0.0100	1.4	20.0
1,1,1-Trichloroethane	Ave	0.3709	0.3787	0.1000	0.0102	0.0100	2.1	20.0
Cyclohexane	Ave	0.4608	0.4861	0.1000	0.0105	0.0100	5.5	20.0
1,1-Dichloropropene	Ave	0.3756	0.3860		0.0103	0.0100	2.7	20.0
Carbon tetrachloride	Ave	0.3034	0.3246	0.1000	0.0107	0.0100	7.0	20.0
Isobutyl alcohol	Ave	0.0043	0.0045		0.262	0.250	4.6	20.0
1,2-Dichloroethane	Ave	0.3012	0.3057	0.1000	0.0102	0.0100	1.5	20.0
Benzene	Ave	1.167	1.181	0.5000	0.0101	0.0100	1.2	20.0
n-Heptane	Lin1		0.1655		0.0104	0.0100	4.3	20.0
Trichloroethene	Ave	0.2820	0.2986	0.1500	0.0106	0.0100	5.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-239770/12 Calibration Date: 07/26/2016 14:18

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM6781.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	0.4336	0.4557	0.1000	0.0105	0.0100	5.1	20.0
1,2-Dichloropropane	Ave	0.2593	0.2622	0.1000	0.0101	0.0100	1.1	20.0
Dibromomethane	Ave	0.1191	0.1223		0.0103	0.0100	2.7	20.0
1,4-Dioxane	Ave	0.0014	0.0017		0.252	0.200	26.1	50.0
Bromodichloromethane	Ave	0.2972	0.3038	0.1500	0.0102	0.0100	2.2	20.0
2-Chloroethyl vinyl ether	Ave	0.0930	0.0981		0.0105	0.0100	5.4	20.0
cis-1,3-Dichloropropene	Ave	0.3520	0.3730	0.1500	0.0106	0.0100	6.0	20.0
4-Methyl-2-pentanone	Ave	0.1396	0.1375	0.0500	0.0197	0.0200	-1.5	20.0
Toluene	Ave	1.596	1.635	0.4000	0.0102	0.0100	2.4	20.0
trans-1,3-Dichloropropene	Ave	0.4003	0.4151	0.1000	0.0104	0.0100	3.7	20.0
Ethyl methacrylate	Ave	0.3316	0.3377		0.0102	0.0100	1.8	20.0
1,1,2-Trichloroethane	Ave	0.2387	0.2419	0.1000	0.0101	0.0100	1.4	20.0
Tetrachloroethene	Ave	0.2920	0.2982	0.1500	0.0102	0.0100	2.1	20.0
1,3-Dichloropropane	Ave	0.4386	0.4463		0.0102	0.0100	1.8	20.0
2-Hexanone	Ave	0.1384	0.1334	0.0500	0.0193	0.0200	-3.6	20.0
Dibromochloromethane	Ave	0.2503	0.2602		0.0104	0.0100	4.0	20.0
1,2-Dibromoethane	Ave	0.2195	0.2332		0.0106	0.0100	6.2	20.0
Chlorobenzene	Ave	1.000	1.018	0.3000	0.0102	0.0100	1.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3547	0.3574		0.0101	0.0100	0.8	20.0
Ethylbenzene	Ave	0.5436	0.5594		0.0103	0.0100	2.9	20.0
m-Xylene & p-Xylene	Ave	0.6666	0.7047		0.0106	0.0100	5.7	20.0
o-Xylene	Ave	0.6975	0.7122		0.0102	0.0100	2.1	20.0
Styrene	Ave	1.070	1.111	0.3000	0.0104	0.0100	3.9	20.0
Bromoform	Ave	0.1269	0.1373	0.1000	0.0108	0.0100	8.2	20.0
Isopropylbenzene	Ave	1.742	1.838	0.1000	0.0105	0.0100	5.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5093	0.5085	0.3000	0.00999	0.0100	-0.1	20.0
Bromobenzene	Ave	0.7361	0.7376		0.0100	0.0100	0.2	20.0
1,2,3-Trichloropropane	Ave	0.1530	0.1534		0.0100	0.0100	0.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0975	0.0988		0.0101	0.0100	1.3	20.0
n-Propylbenzene	Ave	0.8630	0.8915		0.0103	0.0100	3.3	20.0
2-Chlorotoluene	Ave	0.7594	0.7823		0.0103	0.0100	3.0	20.0
1,3,5-Trimethylbenzene	Ave	2.714	2.850		0.0105	0.0100	5.0	20.0
4-Chlorotoluene	Ave	0.7706	0.7860		0.0102	0.0100	2.0	20.0
tert-Butylbenzene	Ave	2.260	2.369		0.0105	0.0100	4.8	20.0
1,2,4-Trimethylbenzene	Ave	2.827	2.930		0.0104	0.0100	3.7	20.0
sec-Butylbenzene	Ave	3.156	3.373		0.0107	0.0100	6.9	20.0
1,3-Dichlorobenzene	Ave	1.476	1.492	0.6000	0.0101	0.0100	1.0	20.0
p-Isopropyltoluene	Ave	2.800	2.958		0.0106	0.0100	5.6	20.0
1,4-Dichlorobenzene	Ave	1.498	1.509	0.5000	0.0101	0.0100	0.8	20.0
n-Butylbenzene	Ave	2.315	2.434		0.0105	0.0100	5.1	20.0
1,2-Dichlorobenzene	Ave	1.405	1.437	0.4000	0.0102	0.0100	2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-239770/12 Calibration Date: 07/26/2016 14:18

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM6781.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	0.0719	0.0826	0.0500	0.0115	0.0100	14.9	50.0
1,2,4-Trichlorobenzene	Ave	0.8030	0.8655	0.2000	0.0108	0.0100	7.8	50.0
Hexachlorobutadiene	Ave	0.3421	0.3906		0.0114	0.0100	14.2	20.0
Naphthalene	Ave	1.217	1.463		0.0120	0.0100	20.2	50.0
1,2,3-Trichlorobenzene	Ave	0.5691	0.6979		0.0123	0.0100	22.6*	20.0
Dibromofluoromethane (Surr)	Ave	0.2416	0.2418		0.0100	0.0100	0.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2531	0.2483		0.00981	0.0100	-1.9	20.0
Toluene-d8 (Surr)	Ave	1.388	1.394		0.0100	0.0100	0.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5150	0.5002		0.00971	0.0100	-2.9	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB4945.D BFB Injection Date: 08/17/2016

Instrument ID: A3UX16 BFB Injection Time: 16:14

Analysis Batch No.: 243081

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.2
75	30.0 - 60.0 % of mass 95	44.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.4
173	Less than 2.0 % of mass 174	0.7 (0.9) 1
174	50.0 - 120.00 % of mass 95	78.8
175	5.0 - 9.0 % of mass 174	5.6 (7.1) 1
176	95.0 - 101.0 % of mass 174	75.7 (96.1) 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
	CCVIS 240-243081/2	UXM7318.D	08/17/2016	16:58
	LCS 240-243081/3	UXM7319.D	08/17/2016	17:21
	CCV 240-243081/4	UXM7320.D	08/17/2016	17:43
	MB 240-243081/6	UXM7322.D	08/17/2016	18:29
MSA-SW37A-081516	240-68359-1	UXM7323.D	08/17/2016	18:51
MSA-SW37B-081516	240-68359-2	UXM7324.D	08/17/2016	19:14
MSA-SW37C-081516	240-68359-3	UXM7325.D	08/17/2016	19:37
MSA-SW37D-081516	240-68359-4	UXM7326.D	08/17/2016	20:00
MSA-SW38A-081516	240-68359-5	UXM7327.D	08/17/2016	20:23
MSA-SW38B-081516	240-68359-6	UXM7328.D	08/17/2016	20:46
MSA-SW38C-081516	240-68359-7	UXM7329.D	08/17/2016	21:08
MSA-SW38D-081516	240-68359-8	UXM7330.D	08/17/2016	21:31
MSA-SW39A-081516	240-68359-9	UXM7331.D	08/17/2016	21:54
MSA-SW39B-081516	240-68359-10	UXM7332.D	08/17/2016	22:16
MSA-SW39C-081516	240-68359-11	UXM7333.D	08/17/2016	22:39
MSA-SW39D-081516	240-68359-12	UXM7334.D	08/17/2016	23:01
MSA-SW40A-081516	240-68359-13	UXM7335.D	08/17/2016	23:24
MSA-SW40B-081516	240-68359-14	UXM7336.D	08/17/2016	23:46
MSA-SW40C-081516	240-68359-15	UXM7337.D	08/18/2016	00:09
MSA-SW40D-081516	240-68359-16	UXM7338.D	08/18/2016	00:32
MSA-SW41A-081516	240-68359-17	UXM7339.D	08/18/2016	00:55
MSA-SW41B-081516	240-68359-18	UXM7340.D	08/18/2016	01:18
MSA-SW41C-081516	240-68359-19	UXM7341.D	08/18/2016	01:40
MSA-SW41D-081516	240-68359-20	UXM7342.D	08/18/2016	02:03
MSA-SW41D-081516 MS	240-68359-20 MS	UXM7343.D	08/18/2016	02:25
MSA-SW41D-081516 MSD	240-68359-20 MSD	UXM7344.D	08/18/2016	02:48

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-243081/2 Calibration Date: 08/17/2016 16:58

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM7318.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	0.2463	0.3187	0.1000	0.0129	0.0100	29.4*	20.0
Chloromethane	Ave	0.3400	0.3780	0.1000	0.0111	0.0100	11.2	20.0
Vinyl chloride	Ave	0.3249	0.3912	0.1000	0.0120	0.0100	20.4*	20.0
Butadiene	Ave	0.3046	0.3776		0.0124	0.0100	24.0*	20.0
Bromomethane	Ave	0.1198	0.1521	0.0500	0.0127	0.0100	27.0*	20.0
Chloroethane	Ave	0.1071	0.1360	0.0500	0.0127	0.0100	27.0*	20.0
Dichlorofluoromethane	Ave	0.3439	0.3942		0.0115	0.0100	14.6	20.0
Trichlorofluoromethane	Ave	0.2533	0.3222	0.1000	0.0127	0.0100	27.2*	20.0
Ethyl ether	Ave	0.2021	0.1988		0.00984	0.0100	-1.6	20.0
Acrolein	Ave	0.0303	0.0279		0.0460	0.0500	-8.0	50.0
1,1-Dichloroethene	Ave	0.2546	0.2858	0.1000	0.0112	0.0100	12.3	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.1814	0.2055	0.0500	0.0113	0.0100	13.3	20.0
Acetone	Ave	0.0610	0.0619	0.0100	0.0203	0.0200	1.5	50.0
Iodomethane	Ave	0.3991	0.4171		0.0105	0.0100	4.5	20.0
Carbon disulfide	Ave	0.8369	0.9474	0.1000	0.0113	0.0100	13.2	20.0
3-Chloro-1-propene	Ave	0.1500	0.1760		0.0117	0.0100	17.3	20.0
Methyl acetate	Ave	0.1188	0.1121	0.1000	0.0472	0.0500	-5.7	20.0
Methylene Chloride	Lin1		0.3163	0.1000	0.00999	0.0100	-0.1	50.0
tert-Butyl alcohol	Ave	0.0133	0.0127		0.0953	0.100	-4.7	50.0
Acrylonitrile	Ave	0.0633	0.0617		0.0975	0.100	-2.5	20.0
Methyl tert-butyl ether	Ave	0.6542	0.6278	0.1000	0.00960	0.0100	-4.0	20.0
trans-1,2-Dichloroethene	Ave	0.2894	0.3142	0.1000	0.0109	0.0100	8.6	20.0
Hexane	Ave	0.0639	0.0679		0.0106	0.0100	6.3	20.0
1,1-Dichloroethane	Ave	0.5121	0.5491	0.2000	0.0107	0.0100	7.2	20.0
Vinyl acetate	Ave	0.3350	0.3574		0.0107	0.0100	6.7	50.0
2,2-Dichloropropane	Ave	0.3420	0.3591		0.0105	0.0100	5.0	20.0
2-Butanone	Ave	0.0667	0.0659	0.0100	0.0198	0.0200	-1.2	20.0
cis-1,2-Dichloroethene	Ave	0.3190	0.3320	0.1000	0.0104	0.0100	4.1	20.0
Bromochloromethane	Ave	0.1303	0.1323		0.0102	0.0100	1.5	20.0
Tetrahydrofuran	Ave	0.0454	0.0406		0.0179	0.0200	-10.6	20.0
Chloroform	Ave	0.4653	0.4805	0.2000	0.0103	0.0100	3.3	20.0
1,1,1-Trichloroethane	Ave	0.3709	0.3867	0.1000	0.0104	0.0100	4.2	20.0
Cyclohexane	Ave	0.4608	0.5101	0.1000	0.0111	0.0100	10.7	20.0
1,1-Dichloropropene	Ave	0.3756	0.3992		0.0106	0.0100	6.3	20.0
Carbon tetrachloride	Ave	0.3034	0.3239	0.1000	0.0107	0.0100	6.8	20.0
Isobutyl alcohol	Ave	0.0043	0.0040		0.229	0.250	-8.4	20.0
1,2-Dichloroethane	Ave	0.3012	0.2889	0.1000	0.00959	0.0100	-4.1	20.0
Benzene	Ave	1.167	1.211	0.5000	0.0104	0.0100	3.7	20.0
n-Heptane	Lin1		0.1615		0.0101	0.0100	1.1	20.0
Trichloroethene	Ave	0.2820	0.2816	0.1500	0.00999	0.0100	-0.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-243081/2 Calibration Date: 08/17/2016 16:58

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM7318.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	0.4336	0.4278	0.1000	0.00987	0.0100	-1.3	20.0
1,2-Dichloropropane	Ave	0.2593	0.2686	0.1000	0.0104	0.0100	3.6	20.0
Dibromomethane	Ave	0.1191	0.1156		0.00971	0.0100	-2.9	20.0
1,4-Dioxane	Ave	0.0014	0.0014		0.209	0.200	4.4	50.0
Bromodichloromethane	Ave	0.2972	0.2989	0.1500	0.0101	0.0100	0.6	20.0
2-Chloroethyl vinyl ether	Ave	0.0930	0.0960		0.0206	0.0200	3.2	20.0
cis-1,3-Dichloropropene	Ave	0.3520	0.3781	0.1500	0.0107	0.0100	7.4	20.0
4-Methyl-2-pentanone	Ave	0.1396	0.1269	0.0500	0.0182	0.0200	-9.1	20.0
Toluene	Ave	1.596	1.732	0.4000	0.0108	0.0100	8.5	20.0
trans-1,3-Dichloropropene	Ave	0.4003	0.4276	0.1000	0.0107	0.0100	6.8	20.0
Ethyl methacrylate	Ave	0.3316	0.3105		0.00937	0.0100	-6.3	20.0
1,1,2-Trichloroethane	Ave	0.2387	0.2475	0.1000	0.0104	0.0100	3.7	20.0
Tetrachloroethene	Ave	0.2920	0.2991	0.1500	0.0102	0.0100	2.4	20.0
1,3-Dichloropropane	Ave	0.4386	0.4612		0.0105	0.0100	5.1	20.0
2-Hexanone	Ave	0.1384	0.1275	0.0500	0.0184	0.0200	-7.9	20.0
Dibromochloromethane	Ave	0.2503	0.2582		0.0103	0.0100	3.1	20.0
1,2-Dibromoethane	Ave	0.2195	0.2252		0.0103	0.0100	2.6	20.0
Chlorobenzene	Ave	1.000	1.053	0.3000	0.0105	0.0100	5.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3547	0.3641		0.0103	0.0100	2.7	20.0
Ethylbenzene	Ave	0.5436	0.5782		0.0106	0.0100	6.4	20.0
m-Xylene & p-Xylene	Ave	0.6666	0.7139		0.0107	0.0100	7.1	20.0
o-Xylene	Ave	0.6975	0.7449		0.0107	0.0100	6.8	20.0
Styrene	Ave	1.070	1.129	0.3000	0.0106	0.0100	5.6	20.0
Bromoform	Ave	0.1269	0.1178	0.1000	0.00928	0.0100	-7.2	20.0
Isopropylbenzene	Ave	1.742	1.790	0.1000	0.0103	0.0100	2.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5093	0.5506	0.3000	0.0108	0.0100	8.1	20.0
Bromobenzene	Ave	0.7361	0.7845		0.0107	0.0100	6.6	20.0
1,2,3-Trichloropropane	Ave	0.1530	0.1534		0.0100	0.0100	0.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0975	0.1053		0.0108	0.0100	7.9	20.0
n-Propylbenzene	Ave	0.8630	0.9294		0.0108	0.0100	7.7	20.0
2-Chlorotoluene	Ave	0.7594	0.8401		0.0111	0.0100	10.6	20.0
1,3,5-Trimethylbenzene	Ave	2.714	2.954		0.0109	0.0100	8.9	20.0
4-Chlorotoluene	Ave	0.7706	0.8447		0.0110	0.0100	9.6	20.0
tert-Butylbenzene	Ave	2.260	2.347		0.0104	0.0100	3.8	20.0
1,2,4-Trimethylbenzene	Ave	2.827	3.068		0.0109	0.0100	8.5	20.0
sec-Butylbenzene	Ave	3.156	3.206		0.0102	0.0100	1.6	20.0
1,3-Dichlorobenzene	Ave	1.476	1.549	0.6000	0.0105	0.0100	4.9	20.0
p-Isopropyltoluene	Ave	2.800	2.832		0.0101	0.0100	1.1	20.0
1,4-Dichlorobenzene	Ave	1.498	1.536	0.5000	0.0103	0.0100	2.5	20.0
n-Butylbenzene	Ave	2.315	2.274		0.00982	0.0100	-1.8	20.0
1,2-Dichlorobenzene	Ave	1.405	1.462	0.4000	0.0104	0.0100	4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-243081/2 Calibration Date: 08/17/2016 16:58

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM7318.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	0.0719	0.0734	0.0500	0.0102	0.0100	2.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8030	0.7138	0.2000	0.00889	0.0100	-11.1	50.0
Hexachlorobutadiene	Ave	0.3421	0.3136		0.00917	0.0100	-8.3	20.0
Naphthalene	Ave	1.217	1.146		0.00942	0.0100	-5.8	50.0
1,2,3-Trichlorobenzene	Ave	0.5691	0.4803		0.00844	0.0100	-15.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2416	0.2327		0.00963	0.0100	-3.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2531	0.2296		0.00907	0.0100	-9.3	20.0
Toluene-d8 (Surr)	Ave	1.388	1.427		0.0103	0.0100	2.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5150	0.5030		0.00977	0.0100	-2.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCV 240-243081/4 Calibration Date: 08/17/2016 17:43

Instrument ID: A3UX16 Calib Start Date: 06/01/2016 15:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2016 17:02

Lab File ID: UXM7320.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	0.0228	0.0200		0.0875	0.100	-12.5	20.0
2-Chloro-1,3-butadiene	Ave	0.4316	0.4321		0.0100	0.0100	0.1	20.0
Diisopropyl ether	Ave	0.2496	0.2397		0.00960	0.0100	-4.0	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8440	0.7520		0.00891	0.0100	-10.9	20.0
Propionitrile	Ave	0.0286	0.0202		0.0705	0.100	-29.5*	20.0
Ethyl acetate	Ave	0.1684	0.1126		0.0134	0.0200	-33.1	50.0
Methacrylonitrile	Ave	0.1290	0.0883		0.0684	0.100	-31.6*	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7756	0.6521		0.00841	0.0100	-15.9	20.0
n-Butanol	Ave	0.0049	0.0033		0.170	0.250	-32.1*	20.0
Methyl methacrylate	Ave	0.1806	0.1116		0.0124	0.0200	-38.2*	20.0
2-Nitropropane	Ave	0.0636	0.0263		0.00829	0.0200	-58.6*	20.0
1-Chlorohexane	Ave	0.4765	0.4441		0.00932	0.0100	-6.8	20.0
Cyclohexanone	Lin1		0.0118		0.0687	0.100	-31.3*	20.0
1,2,3-Trimethylbenzene	Ave	2.977	2.781		0.00934	0.0100	-6.6	20.0
1,3,5-Trichlorobenzene	Ave	0.996	0.8760		0.00880	0.0100	-12.0	20.0
2-Methylnaphthalene	Ave	1.416	0.1758		0.00248	0.0200	-87.6*	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB4953.D BFB Injection Date: 08/23/2016

Instrument ID: A3UX16 BFB Injection Time: 17:04

Analysis Batch No.: 243935

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	44.4	
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	0.7	(1.0) 1
174	50.0 - 120.00 % of mass 95	75.8	
175	5.0 - 9.0 % of mass 174	5.4	(7.2) 1
176	95.0 - 101.0 % of mass 174	74.7	(98.6) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.9) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-243935/3	UXM7480.D	08/23/2016	17:28
	LCS 240-243935/4	UXM7481.D	08/23/2016	17:51
	CCV 240-243935/5	UXM7482.D	08/23/2016	18:13
	MB 240-243935/7	UXM7484.D	08/23/2016	18:58
MSA-SW42A-081516	240-68359-21	UXM7485.D	08/23/2016	19:21
MSA-SW42B-081516	240-68359-22	UXM7486.D	08/23/2016	19:44
MSA-SW42C-081516	240-68359-23	UXM7487.D	08/23/2016	20:06
MSA-SW42D-081516	240-68359-24	UXM7488.D	08/23/2016	20:29
MSA-SW43A-081516	240-68359-25	UXM7489.D	08/23/2016	20:52
MSA-SW43B-081516	240-68359-26	UXM7490.D	08/23/2016	21:15
MSA-SW43C-081516	240-68359-27	UXM7491.D	08/23/2016	21:38
MSA-SW43D-081516	240-68359-28	UXM7492.D	08/23/2016	22:01
MSA-SW44A-081516	240-68359-29	UXM7493.D	08/23/2016	22:23
MSA-SW44B-081516	240-68359-30	UXM7494.D	08/23/2016	22:46
MSA-SW44C-081516	240-68359-31	UXM7495.D	08/23/2016	23:08
MSA-SW44D-081516	240-68359-32	UXM7496.D	08/23/2016	23:31
MSA-SW45A-081516	240-68359-33	UXM7497.D	08/23/2016	23:53
MSA-SW45B-081516	240-68359-34	UXM7498.D	08/24/2016	00:16
MSA-SW45C-081516	240-68359-35	UXM7499.D	08/24/2016	00:39
MSA-SW45D-081516	240-68359-36	UXM7500.D	08/24/2016	01:02
EL-SW01A-081516	240-68359-37	UXM7501.D	08/24/2016	01:24
EL-SW01B-081516	240-68359-38	UXM7502.D	08/24/2016	01:47
EL-SW01C-081516	240-68359-39	UXM7503.D	08/24/2016	02:10

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-243935/3 Calibration Date: 08/23/2016 17:28

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM7480.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	0.2463	0.2461	0.1000	0.0200	0.0200	-0.0	20.0
Chloromethane	Ave	0.3400	0.3858	0.1000	0.0227	0.0200	13.4	20.0
Vinyl chloride	Ave	0.3249	0.3653	0.1000	0.0225	0.0200	12.4	20.0
Butadiene	Ave	0.3046	0.3391		0.0223	0.0200	11.3	20.0
Bromomethane	Ave	0.1198	0.1746	0.0500	0.0292	0.0200	45.8*	20.0
Chloroethane	Ave	0.1071	0.1846	0.0500	0.0345	0.0200	72.4*	20.0
Dichlorofluoromethane	Ave	0.3439	0.4479		0.0260	0.0200	30.2*	20.0
Trichlorofluoromethane	Ave	0.2533	0.2849	0.1000	0.0225	0.0200	12.5	20.0
Ethyl ether	Ave	0.2021	0.1844		0.0182	0.0200	-8.8	20.0
Acrolein	Ave	0.0303	0.0292		0.0962	0.100	-3.8	50.0
1,1-Dichloroethene	Ave	0.2546	0.2760	0.1000	0.0217	0.0200	8.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1814	0.2035	0.0500	0.0224	0.0200	12.2	20.0
Acetone	Ave	0.0610	0.0550	0.0100	0.0361	0.0400	-9.8	50.0
Iodomethane	Ave	0.3991	0.4088		0.0205	0.0200	2.4	20.0
Carbon disulfide	Ave	0.8369	0.9534	0.1000	0.0228	0.0200	13.9	20.0
3-Chloro-1-propene	Ave	0.1500	0.1775		0.0237	0.0200	18.3	20.0
Methyl acetate	Ave	0.1188	0.1037	0.1000	0.0873	0.100	-12.7	20.0
Methylene Chloride	Lin1		0.3081	0.1000	0.0204	0.0200	2.1	50.0
tert-Butyl alcohol	Ave	0.0133	0.0105		0.158	0.200	-21.1	50.0
Acrylonitrile	Ave	0.0633	0.0578		0.183	0.200	-8.6	20.0
trans-1,2-Dichloroethene	Ave	0.2894	0.3028	0.1000	0.0209	0.0200	4.6	20.0
Methyl tert-butyl ether	Ave	0.6542	0.5913	0.1000	0.0181	0.0200	-9.6	20.0
Hexane	Ave	0.0639	0.0654		0.0205	0.0200	2.4	20.0
1,1-Dichloroethane	Ave	0.5121	0.5191	0.2000	0.0203	0.0200	1.4	20.0
Vinyl acetate	Ave	0.3350	0.2950		0.0176	0.0200	-11.9	50.0
cis-1,2-Dichloroethene	Ave	0.3190	0.3011	0.1000	0.0189	0.0200	-5.6	20.0
2,2-Dichloropropane	Ave	0.3420	0.3579		0.0209	0.0200	4.7	20.0
2-Butanone	Ave	0.0667	0.0545	0.0100	0.0327	0.0400	-18.3	20.0
Bromochloromethane	Ave	0.1303	0.1159		0.0178	0.0200	-11.1	20.0
Tetrahydrofuran	Ave	0.0454	0.0367		0.0323	0.0400	-19.2	20.0
Chloroform	Ave	0.4653	0.4365	0.2000	0.0188	0.0200	-6.2	20.0
1,1,1-Trichloroethane	Ave	0.3709	0.3753	0.1000	0.0202	0.0200	1.2	20.0
Cyclohexane	Ave	0.4608	0.5378	0.1000	0.0233	0.0200	16.7	20.0
1,1-Dichloropropene	Ave	0.3756	0.3598		0.0192	0.0200	-4.2	20.0
Carbon tetrachloride	Ave	0.3034	0.3177	0.1000	0.0209	0.0200	4.7	20.0
Isobutyl alcohol	Ave	0.0043	0.0035		0.405	0.500	-19.0	20.0
1,2-Dichloroethane	Ave	0.3012	0.2451	0.1000	0.0163	0.0200	-18.6	20.0
Benzene	Ave	1.167	1.080	0.5000	0.0185	0.0200	-7.5	20.0
n-Heptane	Lin1		0.1483		0.0206	0.0200	3.2	20.0
Trichloroethene	Ave	0.2820	0.2372	0.1500	0.0168	0.0200	-15.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-243935/3 Calibration Date: 08/23/2016 17:28

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM7480.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	0.4336	0.4465	0.1000	0.0206	0.0200	3.0	20.0
1,2-Dichloropropane	Ave	0.2593	0.2371	0.1000	0.0183	0.0200	-8.5	20.0
Dibromomethane	Ave	0.1191	0.0956		0.0160	0.0200	-19.8	20.0
1,4-Dioxane	Ave	0.0014	0.0010		0.290	0.400	-27.4	50.0
Bromodichloromethane	Ave	0.2972	0.2541	0.1500	0.0171	0.0200	-14.5	20.0
2-Chloroethyl vinyl ether	Ave	0.0930	0.0764		0.0329	0.0400	-17.9	20.0
cis-1,3-Dichloropropene	Ave	0.3520	0.3082	0.1500	0.0175	0.0200	-12.4	20.0
4-Methyl-2-pentanone	Ave	0.1396	0.1174	0.0500	0.0336	0.0400	-15.9	20.0
Toluene	Ave	1.596	1.474	0.4000	0.0185	0.0200	-7.7	20.0
trans-1,3-Dichloropropene	Ave	0.4003	0.3483	0.1000	0.0174	0.0200	-13.0	20.0
Ethyl methacrylate	Ave	0.3316	0.2775		0.0167	0.0200	-16.3	20.0
1,1,2-Trichloroethane	Ave	0.2387	0.1978	0.1000	0.0166	0.0200	-17.1	20.0
Tetrachloroethene	Ave	0.2920	0.2522	0.1500	0.0173	0.0200	-13.6	20.0
1,3-Dichloropropane	Ave	0.4386	0.3752		0.0171	0.0200	-14.5	20.0
2-Hexanone	Ave	0.1384	0.1178	0.0500	0.0341	0.0400	-14.9	20.0
Dibromochloromethane	Ave	0.2503	0.2164		0.0173	0.0200	-13.6	20.0
1,2-Dibromoethane	Ave	0.2195	0.1881		0.0171	0.0200	-14.3	20.0
Chlorobenzene	Ave	1.000	0.9060	0.3000	0.0181	0.0200	-9.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3547	0.3199		0.0180	0.0200	-9.8	20.0
Ethylbenzene	Ave	0.5436	0.5115		0.0188	0.0200	-5.9	20.0
m-Xylene & p-Xylene	Ave	0.6666	0.6474		0.0194	0.0200	-2.9	20.0
o-Xylene	Ave	0.6975	0.6652		0.0191	0.0200	-4.6	20.0
Styrene	Ave	1.070	1.032	0.3000	0.0193	0.0200	-3.5	20.0
Bromoform	Ave	0.1269	0.1031	0.1000	0.0163	0.0200	-18.7	20.0
Isopropylbenzene	Ave	1.742	1.654	0.1000	0.0190	0.0200	-5.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5093	0.4707	0.3000	0.0185	0.0200	-7.6	20.0
Bromobenzene	Ave	0.7361	0.6750		0.0183	0.0200	-8.3	20.0
1,2,3-Trichloropropane	Ave	0.1530	0.1376		0.0180	0.0200	-10.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0975	0.0919		0.0188	0.0200	-5.8	20.0
n-Propylbenzene	Ave	0.8630	0.8498		0.0197	0.0200	-1.5	20.0
2-Chlorotoluene	Ave	0.7594	0.7338		0.0193	0.0200	-3.4	20.0
1,3,5-Trimethylbenzene	Ave	2.714	2.677		0.0197	0.0200	-1.4	20.0
4-Chlorotoluene	Ave	0.7706	0.7335		0.0190	0.0200	-4.8	20.0
tert-Butylbenzene	Ave	2.260	2.081		0.0184	0.0200	-7.9	20.0
1,2,4-Trimethylbenzene	Ave	2.827	2.819		0.0199	0.0200	-0.3	20.0
sec-Butylbenzene	Ave	3.156	3.005		0.0190	0.0200	-4.8	20.0
1,3-Dichlorobenzene	Ave	1.476	1.313	0.6000	0.0178	0.0200	-11.0	20.0
p-Isopropyltoluene	Ave	2.800	2.654		0.0190	0.0200	-5.2	20.0
1,4-Dichlorobenzene	Ave	1.498	1.311	0.5000	0.0175	0.0200	-12.5	20.0
n-Butylbenzene	Ave	2.315	2.163		0.0187	0.0200	-6.6	20.0
1,2-Dichlorobenzene	Ave	1.405	1.264	0.4000	0.0180	0.0200	-10.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-243935/3 Calibration Date: 08/23/2016 17:28

Instrument ID: A3UX16 Calib Start Date: 07/26/2016 12:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/26/2016 13:55

Lab File ID: UXM7480.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	0.0719	0.0586	0.0500	0.0163	0.0200	-18.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8030	0.5869	0.2000	0.0146	0.0200	-26.9	50.0
Hexachlorobutadiene	Ave	0.3421	0.2876		0.0168	0.0200	-15.9	20.0
Naphthalene	Ave	1.217	0.9287		0.0153	0.0200	-23.7	50.0
1,2,3-Trichlorobenzene	Ave	0.5691	0.3823		0.0134	0.0200	-32.8*	20.0
Dibromofluoromethane (Surr)	Ave	0.2416	0.2354		0.00974	0.0100	-2.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2531	0.2196		0.00868	0.0100	-13.2	20.0
Toluene-d8 (Surr)	Ave	1.388	1.387		0.0100	0.0100	-0.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5150	0.5127		0.00996	0.0100	-0.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCV 240-243935/5 Calibration Date: 08/23/2016 18:13

Instrument ID: A3UX16 Calib Start Date: 06/01/2016 15:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2016 17:02

Lab File ID: UXM7482.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	0.0228	0.0196		0.172	0.200	-13.9	20.0
2-Chloro-1,3-butadiene	Ave	0.4316	0.4446		0.0206	0.0200	3.0	20.0
Diisopropyl ether	Ave	0.2496	0.2420		0.0194	0.0200	-3.0	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8440	0.7751		0.0184	0.0200	-8.2	20.0
Propionitrile	Ave	0.0286	0.0188		0.131	0.200	-34.3*	20.0
Ethyl acetate	Ave	0.1684	0.1026		0.0244	0.0400	-39.1	50.0
Methacrylonitrile	Ave	0.1290	0.0850		0.132	0.200	-34.1*	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7756	0.6460		0.0167	0.0200	-16.7	20.0
n-Butanol	Ave	0.0049	0.0027		0.275	0.500	-45.0*	20.0
Methyl methacrylate	Ave	0.1806	0.1041		0.0231	0.0400	-42.3*	20.0
2-Nitropropane	Ave	0.0636	0.0239		0.0151	0.0400	-62.4*	20.0
1-Chlorohexane	Ave	0.4765	0.4136		0.0174	0.0200	-13.2	20.0
Cyclohexanone	Lin1		0.0099		0.120	0.200	-40.0*	20.0
1,2,3-Trimethylbenzene	Ave	2.977	3.022		0.0203	0.0200	1.5	20.0
1,3,5-Trichlorobenzene	Ave	0.996	0.9117		0.0183	0.0200	-8.4	20.0
2-Methylnaphthalene	Ave	1.416	0.1230		0.00348	0.0400	-91.3*	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB1120.D BFB Injection Date: 06/06/2016

Instrument ID: A3UX17 BFB Injection Time: 16:10

Analysis Batch No.: 233329

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
75	30.0 - 60.0 % of mass 95	46.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	92.0	
175	5.0 - 9.0 % of mass 174	6.4	(6.9) 1
176	95.0 - 101.0 % of mass 174	90.8	(98.8) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.7) 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 240-233329/2	UXR2588.D	06/06/2016	17:07
	STD8260 240-233329/3	UXR2589.D	06/06/2016	17:29
	STD8260 240-233329/4	UXR2590.D	06/06/2016	17:52
	STD8260 240-233329/5	UXR2591.D	06/06/2016	18:14
	STD8260 240-233329/6	UXR2592.D	06/06/2016	18:36
	STD8260 240-233329/7	UXR2593.D	06/06/2016	18:59
	ICV 240-233329/8	UXR2594.D	06/06/2016	19:21
	STDA9 240-233329/9	UXR2595.D	06/06/2016	19:44
	STDA9 240-233329/10	UXR2596.D	06/06/2016	20:06
	STDA9 240-233329/11	UXR2597.D	06/06/2016	20:28
	STDA9 240-233329/12	UXR2598.D	06/06/2016	20:51
	STDA9 240-233329/13	UXR2599.D	06/06/2016	21:13
	STDA9 240-233329/14	UXR2600.D	06/06/2016	21:36
	ICV 240-233329/15	UXR2601.D	06/06/2016	21:58

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 17:07 Calibration End Date: 06/06/2016 18:59 Calibration ID: 34730

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-233329/7	UXR2593.D
Level 2	STD8260 240-233329/6	UXR2592.D
Level 3	STD8260 240-233329/5	UXR2591.D
Level 4	STD8260 240-233329/4	UXR2590.D
Level 5	STD8260 240-233329/3	UXR2589.D
Level 6	STD8260 240-233329/2	UXR2588.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	0.4005 0.3808	0.3267	0.3535	0.3293	0.3451	Ave		0.3560			0.1000	8.2		20.0			
Chloromethane	0.3447 0.3112	0.2932	0.2856	0.2910	0.3132	Ave		0.3065			0.1000	7.1		20.0			
Vinyl chloride	0.3114 0.2841	0.2624	0.2806	0.2710	0.2790	Ave		0.2814			0.1000	5.9		20.0			
Butadiene	0.2886 0.2527	0.2333	0.2478	0.2378	0.2524	Ave		0.2521				7.7		20.0			
Bromomethane	0.0784 0.0677	0.0605	0.0682	0.0690	0.0705	Ave		0.0691			0.0500	8.3		20.0			
Chloroethane	0.0952 0.0809	0.0768	0.0741	0.0796	0.0799	Ave		0.0811			0.0500	9.1		20.0			
Dichlorofluoromethane	0.3182 0.2774	0.2537	0.2575	0.2696	0.2734	Ave		0.2750				8.4		20.0			
Trichlorofluoromethane	0.2646 0.2925	0.2306	0.2539	0.2504	0.2660	Ave		0.2596			0.1000	7.9		20.0			
Ethyl ether	0.2524 0.2193	0.2290	0.2382	0.2196	0.2277	Ave		0.2310				5.4		20.0			
Acrolein	0.0303 0.0285	0.0263	0.0281	0.0282	0.0289	Ave		0.0284				4.6		20.0			
1,1-Dichloroethene	0.3108 0.2764	0.2687	0.2654	0.2634	0.2667	Ave		0.2752			0.1000	6.5		20.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2893 0.2357	0.2268	0.2306	0.2207	0.2301	Ave		0.2389			0.0500	10.5		20.0			
Acetone	0.2069 0.0680	0.0969	0.0852	0.0773	0.0724	Lin1	0.1396	0.0677			0.0100				0.9990		0.9900
Iodomethane	0.4822 0.4228	0.4214	0.4425	0.4195	0.4232	Ave		0.4353				5.6		20.0			
Carbon disulfide	0.6720 0.7685	0.6348	0.6761	0.6856	0.7300	Ave		0.6945			0.1000	6.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 17:07 Calibration End Date: 06/06/2016 18:59 Calibration ID: 34730

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	0.1229 0.1428	0.1210	0.1195	0.1312	0.1392	Ave		0.1294				7.6		20.0			
Methyl acetate	0.1731 0.1442	0.1493	0.1510	0.1503	0.1502	Ave		0.1530			0.1000	6.6		20.0			
Methylene Chloride	0.7016 0.2756	0.3679	0.3246	0.2921	0.2826	Lin1	0.2146	0.2712			0.1000				1.0000		0.9900
tert-Butyl alcohol	0.0187 0.0138	0.0142	0.0142	0.0145	0.0146	Ave		0.0150				12.3		20.0			
Acrylonitrile	0.1008 0.0818	0.0860	0.0873	0.0867	0.0868	Ave		0.0883				7.3		20.0			
Methyl tert-butyl ether	0.6692 0.6716	0.6099	0.6405	0.6391	0.6688	Ave		0.6499			0.1000	3.8		20.0			
trans-1,2-Dichloroethene	0.3013 0.2733	0.2852	0.2838	0.2749	0.2775	Ave		0.2827			0.1000	3.6		20.0			
Hexane	0.0772 0.0729	0.0673	0.0684	0.0681	0.0684	Ave		0.0704				5.5		20.0			
1,1-Dichloroethane	0.5292 0.4571	0.4574	0.4574	0.4504	0.4519	Ave		0.4672			0.2000	6.5		20.0			
Vinyl acetate	0.3291 0.3944	0.3069	0.3240	0.3577	0.3733	Ave		0.3476				9.5		20.0			
2,2-Dichloropropane	0.1911 0.1914	0.1751	0.1919	0.1945	0.2011	Ave		0.1909				4.5		20.0			
cis-1,2-Dichloroethene	0.3355 0.2981	0.2997	0.2987	0.2903	0.3005	Ave		0.3038			0.1000	5.3		20.0			
2-Butanone	0.1257 0.0882	0.0854	0.0941	0.0877	0.0899	Ave		0.0952			0.0100	16.0		20.0			
Bromochloromethane	0.1762 0.1502	0.1442	0.1478	0.1420	0.1485	Ave		0.1515				8.2		20.0			
Tetrahydrofuran	0.0516 0.0539	0.0509	0.0535	0.0547	0.0553	Ave		0.0533				3.2		20.0			
Chloroform	0.5425 0.4536	0.4442	0.4458	0.4425	0.4458	Ave		0.4624			0.2000	8.5		20.0			
1,1,1-Trichloroethane	0.3309 0.3173	0.2930	0.3076	0.3093	0.3208	Ave		0.3131			0.1000	4.1		20.0			
Cyclohexane	0.4376 0.4387	0.3872	0.4285	0.4238	0.4322	Ave		0.4247			0.1000	4.5		20.0			
1,1-Dichloropropene	0.4267 0.3793	0.3552	0.3669	0.3647	0.3736	Ave		0.3777				6.7		20.0			
Carbon tetrachloride	0.2838 0.3168	0.2522	0.2749	0.2843	0.3007	Ave		0.2855			0.1000	7.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 17:07 Calibration End Date: 06/06/2016 18:59 Calibration ID: 34730

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	0.0081 0.0069	0.0077	0.0072	0.0074	0.0075	Ave		0.0075				5.7		20.0			
Benzene	1.3235 1.1446	1.1290	1.1413	1.1035	1.1265	Ave		1.1614			0.5000	6.9		20.0			
1,2-Dichloroethane	0.4022 0.3604	0.3522	0.3570	0.3419	0.3511	Ave		0.3608			0.1000	5.9		20.0			
n-Heptane	0.0588 0.0652	0.0503	0.0567	0.0615	0.0638	Ave		0.0594				9.1		20.0			
Trichloroethene	0.3644 0.3180	0.3090	0.3135	0.3126	0.3155	Ave		0.3222			0.1500	6.5		20.0			
Methylcyclohexane	0.4061 0.4266	0.3756	0.3962	0.3994	0.4120	Ave		0.4026			0.1000	4.2		20.0			
1,2-Dichloropropane	0.2601 0.2490	0.2354	0.2485	0.2503	0.2405	Ave		0.2473			0.1000	3.4		20.0			
Dibromomethane	0.1610 0.1485	0.1402	0.1432	0.1441	0.1449	Ave		0.1470				5.0		20.0			
1,4-Dioxane	0.0029 0.0026	0.0028	0.0029	0.0030	0.0030	Ave		0.0029				5.6		20.0			
Bromodichloromethane	0.2653 0.3136	0.2276	0.2540	0.2676	0.2911	Ave		0.2699			0.1500	11.0		20.0			
2-Chloroethyl vinyl ether	0.1281 0.1508	0.1186	0.1366	0.1423	0.1472	Ave		0.1373				8.9		20.0			
cis-1,3-Dichloropropene	0.3000 0.4026	0.2814	0.3141	0.3483	0.3766	Ave		0.3372			0.1500	13.9		20.0			
4-Methyl-2-pentanone	0.1621 0.1832	0.1492	0.1628	0.1738	0.1825	Ave		0.1690			0.0500	7.9		20.0			
Toluene	1.8286 1.6351	1.6024	1.5375	1.5558	1.5840	Ave		1.6239			0.4000	6.5		20.0			
trans-1,3-Dichloropropene	0.2919 0.4562	0.2888	0.3362	0.3726	0.4115	Ave		0.3595			0.1000	18.6		20.0			
Ethyl methacrylate	0.3345 0.4222	0.3010	0.3543	0.3880	0.4104	Ave		0.3684				12.7		20.0			
1,1,2-Trichloroethane	0.3381 0.2954	0.3085	0.2864	0.2914	0.2949	Ave		0.3025			0.1000	6.3		20.0			
Tetrachloroethene	0.3926 0.3493	0.3523	0.3376	0.3372	0.3377	Ave		0.3511			0.1500	6.1		20.0			
1,3-Dichloropropane	0.5937 0.5405	0.5524	0.5233	0.5218	0.5309	Ave		0.5438				5.0		20.0			
2-Hexanone	0.1341 0.1730	0.1421	0.1531	0.1645	0.1754	Ave		0.1570			0.0500	10.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 17:07 Calibration End Date: 06/06/2016 18:59 Calibration ID: 34730

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								
Dibromochloromethane	0.2293 0.3158	0.2134	0.2419	0.2526	0.2858	Ave		0.2565				14.8		20.0			
1,2-Dibromoethane	0.2988 0.2932	0.2645	0.2770	0.2842	0.2933	Ave		0.2852				4.5		20.0			
Chlorobenzene	1.2518 1.0877	1.0729	1.0513	1.0276	1.0646	Ave		1.0926			0.3000	7.4		20.0			
1,1,1,2-Tetrachloroethane	0.3197 0.3560	0.2825	0.2981	0.3172	0.3364	Ave		0.3183				8.2		20.0			
Ethylbenzene	0.5899 0.5697	0.5344	0.5400	0.5323	0.5633	Ave		0.5549				4.2		20.0			
m-Xylene & p-Xylene	0.8988 0.7264	0.7098	0.6957	0.6802	0.7039	Ave		0.7358				11.1		20.0			
o-Xylene	0.6674 0.6981	0.6183	0.6385	0.6697	0.6935	Ave		0.6642				4.7		20.0			
Styrene	0.9990 1.2000	0.9759	1.0609	1.0948	1.1646	Ave		1.0825			0.3000	8.2		20.0			
Bromoform	0.1318 0.1936	0.1130	0.1309	0.1415	0.1638	Ave		0.1458			0.1000	19.7		20.0			
Isopropylbenzene	1.5666 1.7570	1.4745	1.5687	1.6112	1.6894	Ave		1.6112			0.1000	6.2		20.0			
1,1,2,2-Tetrachloroethane	0.7070 0.6326	0.5994	0.6257	0.6313	0.6389	Ave		0.6392			0.3000	5.6		20.0			
Bromobenzene	0.9800 0.8569	0.8727	0.8562	0.8307	0.8552	Ave		0.8753				6.1		20.0			
1,2,3-Trichloropropane	0.2711 0.2194	0.2093	0.2226	0.2214	0.2254	Ave		0.2282				9.5		20.0			
trans-1,4-Dichloro-2-butene	0.1264 0.1730	0.1255	0.1223	0.1383	0.1561	Ave		0.1403				14.5		20.0			
n-Propylbenzene	0.7103 0.8543	0.7495	0.7912	0.8255	0.8286	Ave		0.7932				6.9		20.0			
2-Chlorotoluene	0.8250 0.7416	0.7284	0.7343	0.7236	0.7335	Ave		0.7477				5.1		20.0			
1,3,5-Trimethylbenzene	2.2288 2.5625	2.2276	2.3368	2.4085	2.4794	Ave		2.3739				5.7		20.0			
4-Chlorotoluene	0.8232 0.7964	0.8204	0.7678	0.7651	0.7867	Ave		0.7933				3.2		20.0			
tert-Butylbenzene	1.9766 2.1722	1.9443	1.9926	2.0901	2.1269	Ave		2.0505				4.5		20.0			
1,2,4-Trimethylbenzene	2.2728 2.6239	2.3467	2.4770	2.4933	2.5682	Ave		2.4636				5.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 17:07 Calibration End Date: 06/06/2016 18:59 Calibration ID: 34730

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.5713 2.8077	2.5087	2.5977	2.6550	2.6936	Ave		2.6390				4.0		20.0			
1,3-Dichlorobenzene	1.8471 1.5210	1.5552	1.5024	1.5112	1.5318	Ave		1.5781			0.6000	8.4		20.0			
p-Isopropyltoluene	2.1070 2.5512	2.1927	2.2705	2.3866	2.4941	Ave		2.3337				7.4		20.0			
1,4-Dichlorobenzene	1.9779 1.5887	1.6251	1.5817	1.5194	1.5593	Ave		1.6420			0.5000	10.2		20.0			
n-Butylbenzene	1.7821 1.9317	1.6494	1.6763	1.8033	1.8399	Ave		1.7804				5.9		20.0			
1,2-Dichlorobenzene	1.7751 1.4597	1.5837	1.4669	1.4467	1.4738	Ave		1.5343			0.4000	8.3		20.0			
1,2-Dibromo-3-Chloropropane	0.1098 0.1075	0.0887	0.0888	0.0944	0.1048	Ave		0.0990			0.0500	9.6		20.0			
1,2,4-Trichlorobenzene	1.3109 0.8968	0.9838	0.9450	0.9580	0.9784	Ave		1.0121			0.2000	14.8		20.0			
Hexachlorobutadiene	0.8783 0.3592	0.5551	0.4335	0.4374	0.3952	Lin1	0.2937	0.3691							0.9960		0.9900
Naphthalene	2.3527 1.9496	1.8705	2.0078	2.1503	2.2724	Ave		2.1006				9.0		20.0			
1,2,3-Trichlorobenzene	1.4503 0.7793	1.0663	0.9692	0.9595	0.9357	Lin1	0.3978	0.8361							0.9910		0.9900
Dibromofluoromethane (Surr)	0.2974 0.2427	0.2371	0.2398	0.2288	0.2436	Ave		0.2482				9.9		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3634 0.2902	0.2847	0.2925	0.2714	0.2856	Ave		0.2980				11.0		20.0			
Toluene-d8 (Surr)	1.5913 1.3757	1.3246	1.3355	1.2747	1.3584	Ave		1.3767				8.0		20.0			
4-Bromofluorobenzene (Surr)	0.5735 0.5169	0.4854	0.4938	0.4826	0.5162	Ave		0.5114				6.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 19:44 Calibration End Date: 06/06/2016 21:36 Calibration ID: 34732

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-233329/14	UXR2600.D
Level 2	STDA9 240-233329/13	UXR2599.D
Level 3	STDA9 240-233329/12	UXR2598.D
Level 4	STDA9 240-233329/11	UXR2597.D
Level 5	STDA9 240-233329/10	UXR2596.D
Level 6	STDA9 240-233329/9	UXR2595.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	0.0267 0.0245	0.0258	0.0246	0.0251	0.0250	Ave		0.0253				3.4		20.0			
Diisopropyl ether	0.2067 0.2327	0.2088	0.2105	0.2181	0.2369	Ave		0.2189				5.9		20.0			
2-Chloro-1,3-butadiene	0.3337 0.3901	0.3485	0.3490	0.3689	0.3851	Ave		0.3625				6.2		20.0			
Ethyl-t-butyl ether (ETBE)	0.5698 0.6656	0.5759	0.5827	0.6094	0.6616	Ave		0.6109				7.1		20.0			
Ethyl acetate	0.1475 0.1601	0.1455	0.1422	0.1498	0.1611	Ave		0.1510				5.2		20.0			
Propionitrile	0.0302 0.0312	0.0312	0.0299	0.0308	0.0318	Ave		0.0308				2.3		20.0			
Methacrylonitrile	0.1150 0.1226	0.1230	0.1199	0.1217	0.1263	Ave		0.1214				3.1		20.0			
Tert-amyl-methyl ether (TAME)	0.4854 0.5751	0.4957	0.5069	0.5301	0.5716	Ave		0.5274				7.3		20.0			
n-Butanol	0.0043 0.0058	0.0043	0.0049	0.0054	0.0063	Ave		0.0052				15.7		20.0			
Ethyl acrylate	0.1892 0.2559	0.2002	0.2121	0.2319	0.2513	Ave		0.2234				12.2		20.0			
Methyl methacrylate	0.1354 0.1743	0.1469	0.1500	0.1611	0.1704	Ave		0.1563				9.5		20.0			
2-Nitropropane	0.0290 0.0385	0.0272	0.0257	0.0292	0.0336	Ave		0.0305				15.5		20.0			
n-Butyl acetate	0.1056 0.1574	0.1058	0.1191	0.1334	0.1578	Ave		0.1298				18.4		20.0			
1-Chlorohexane	0.3382 0.4092	0.3405	0.3535	0.3706	0.4128	Ave		0.3708				9.0		20.0			
Cyclohexanone	0.0105 0.0131	0.0101	0.0111	0.0115	0.0139	Ave		0.0117				12.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 233329

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2016 19:44 Calibration End Date: 06/06/2016 21:36 Calibration ID: 34732

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								
1,2,3-Trimethylbenzene	2.1221 2.5777	2.1559	2.3613	2.4425	2.6716	Ave		2.3885				9.3		20.0			
1,3,5-Trichlorobenzene	1.1244 0.9851	1.0924	1.0150	1.0555	1.0896	Ave		1.0603				4.9		20.0			
2-Methylnaphthalene	0.9851 0.7913	1.1167	1.1542	1.3110	1.2530	Ave		1.1019				17.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-233329/8 Calibration Date: 06/06/2016 19:21

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR2594.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	0.3560	0.3707	0.1000	0.0104	0.0100	4.1	20.0
Chloromethane	Ave	0.3065	0.2890	0.1000	0.00943	0.0100	-5.7	20.0
Vinyl chloride	Ave	0.2814	0.2713	0.1000	0.00964	0.0100	-3.6	20.0
Butadiene	Ave	0.2521	0.2400		0.00952	0.0100	-4.8	30.0
Bromomethane	Ave	0.0691	0.0680	0.0500	0.00985	0.0100	-1.5	20.0
Chloroethane	Ave	0.0811	0.0730	0.0500	0.00900	0.0100	-10.0	20.0
Dichlorofluoromethane	Ave	0.2750	0.2690		0.00978	0.0100	-2.2	20.0
Trichlorofluoromethane	Ave	0.2596	0.2601	0.1000	0.0100	0.0100	0.2	20.0
Ethyl ether	Ave	0.2310	0.2210		0.00957	0.0100	-4.3	20.0
Acrolein	Ave	0.0284	0.0390		0.0687	0.0500	37.4	50.0
1,1-Dichloroethene	Ave	0.2752	0.2652	0.1000	0.00964	0.0100	-3.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2389	0.2314	0.0500	0.00969	0.0100	-3.1	20.0
Acetone	Lin1		0.0613	0.0100	0.0161	0.0200	-19.7	50.0
Iodomethane	Ave	0.4353	0.4267		0.00980	0.0100	-2.0	20.0
Carbon disulfide	Ave	0.6945	0.6801	0.1000	0.00979	0.0100	-2.1	20.0
3-Chloro-1-propene	Ave	0.1294	0.1278		0.00987	0.0100	-1.3	20.0
Methyl acetate	Ave	0.1530	0.1417	0.1000	0.0463	0.0500	-7.4	20.0
Methylene Chloride	Lin1		0.2828	0.1000	0.00963	0.0100	-3.7	50.0
tert-Butyl alcohol	Ave	0.0150	0.0127		0.0846	0.100	-15.4	50.0
Acrylonitrile	Ave	0.0883	0.0821		0.0930	0.100	-7.0	20.0
Methyl tert-butyl ether	Ave	0.6499	0.6224	0.1000	0.00958	0.0100	-4.2	20.0
trans-1,2-Dichloroethene	Ave	0.2827	0.2771	0.1000	0.00980	0.0100	-2.0	20.0
Hexane	Ave	0.0704	0.0697		0.00990	0.0100	-1.0	20.0
1,1-Dichloroethane	Ave	0.4672	0.4322	0.2000	0.00925	0.0100	-7.5	20.0
Vinyl acetate	Ave	0.3476	0.3357		0.00966	0.0100	-3.4	50.0
2,2-Dichloropropane	Ave	0.1909	0.1803		0.00945	0.0100	-5.5	20.0
cis-1,2-Dichloroethene	Ave	0.3038	0.2865	0.1000	0.00943	0.0100	-5.7	20.0
2-Butanone	Ave	0.0952	0.0821	0.0100	0.0172	0.0200	-13.8	20.0
Bromochloromethane	Ave	0.1515	0.1423		0.00939	0.0100	-6.1	20.0
Tetrahydrofuran	Ave	0.0533	0.0492		0.0185	0.0200	-7.7	20.0
Chloroform	Ave	0.4624	0.4296	0.2000	0.00929	0.0100	-7.1	20.0
1,1,1-Trichloroethane	Ave	0.3131	0.3035	0.1000	0.00969	0.0100	-3.1	20.0
Cyclohexane	Ave	0.4247	0.4174	0.1000	0.00983	0.0100	-1.7	20.0
1,1-Dichloropropene	Ave	0.3777	0.3493		0.00925	0.0100	-7.5	20.0
Carbon tetrachloride	Ave	0.2855	0.2946	0.1000	0.0103	0.0100	3.2	20.0
Isobutyl alcohol	Ave	0.0075	0.0067		0.226	0.250	-9.7	20.0
Benzene	Ave	1.161	1.084	0.5000	0.00933	0.0100	-6.7	20.0
1,2-Dichloroethane	Ave	0.3608	0.3418	0.1000	0.00947	0.0100	-5.3	20.0
n-Heptane	Ave	0.0594	0.0569		0.00958	0.0100	-4.2	20.0
Trichloroethene	Ave	0.3222	0.3105	0.1500	0.00964	0.0100	-3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-233329/8 Calibration Date: 06/06/2016 19:21

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR2594.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	0.4026	0.3848	0.1000	0.00956	0.0100	-4.4	20.0
1,2-Dichloropropane	Ave	0.2473	0.2409	0.1000	0.00974	0.0100	-2.6	20.0
1,4-Dioxane	Ave	0.0029	0.0024		0.165	0.200	-17.5	50.0
Dibromomethane	Ave	0.1470	0.1389		0.00945	0.0100	-5.5	20.0
Bromodichloromethane	Ave	0.2699	0.2626	0.1500	0.00973	0.0100	-2.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1373	0.1265		0.00921	0.0100	-7.9	20.0
cis-1,3-Dichloropropene	Ave	0.3372	0.3260	0.1500	0.00967	0.0100	-3.3	20.0
4-Methyl-2-pentanone	Ave	0.1690	0.1646	0.0500	0.0195	0.0200	-2.6	20.0
Toluene	Ave	1.624	1.516	0.4000	0.00934	0.0100	-6.6	20.0
trans-1,3-Dichloropropene	Ave	0.3595	0.3440	0.1000	0.00957	0.0100	-4.3	20.0
Ethyl methacrylate	Ave	0.3684	0.3820		0.0104	0.0100	3.7	20.0
1,1,2-Trichloroethane	Ave	0.3025	0.2898	0.1000	0.00958	0.0100	-4.2	20.0
Tetrachloroethene	Ave	0.3511	0.3343	0.1500	0.00952	0.0100	-4.8	20.0
1,3-Dichloropropane	Ave	0.5438	0.5231		0.00962	0.0100	-3.8	20.0
2-Hexanone	Ave	0.1570	0.1515	0.0500	0.0193	0.0200	-3.5	20.0
Dibromochloromethane	Ave	0.2565	0.2459		0.00959	0.0100	-4.1	20.0
1,2-Dibromoethane	Ave	0.2852	0.2862		0.0100	0.0100	0.4	20.0
Chlorobenzene	Ave	1.093	1.008	0.3000	0.00923	0.0100	-7.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3183	0.3097		0.00973	0.0100	-2.7	20.0
Ethylbenzene	Ave	0.5549	0.5172		0.00932	0.0100	-6.8	20.0
m-Xylene & p-Xylene	Ave	0.7358	0.6656		0.00905	0.0100	-9.5	20.0
o-Xylene	Ave	0.6642	0.6301		0.00949	0.0100	-5.1	20.0
Styrene	Ave	1.083	1.070	0.3000	0.00988	0.0100	-1.2	20.0
Bromoform	Ave	0.1458	0.1474	0.1000	0.0101	0.0100	1.1	20.0
Isopropylbenzene	Ave	1.611	1.574	0.1000	0.00977	0.0100	-2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6392	0.5752	0.3000	0.00900	0.0100	-10.0	20.0
Bromobenzene	Ave	0.8753	0.7955		0.00909	0.0100	-9.1	20.0
1,2,3-Trichloropropane	Ave	0.2282	0.2156		0.00945	0.0100	-5.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1403	0.1363		0.00972	0.0100	-2.8	20.0
n-Propylbenzene	Ave	0.7932	0.7654		0.00965	0.0100	-3.5	20.0
2-Chlorotoluene	Ave	0.7477	0.6915		0.00925	0.0100	-7.5	20.0
1,3,5-Trimethylbenzene	Ave	2.374	2.216		0.00933	0.0100	-6.7	20.0
4-Chlorotoluene	Ave	0.7933	0.7172		0.00904	0.0100	-9.6	20.0
tert-Butylbenzene	Ave	2.050	1.907		0.00930	0.0100	-7.0	20.0
1,2,4-Trimethylbenzene	Ave	2.464	2.304		0.00935	0.0100	-6.5	20.0
sec-Butylbenzene	Ave	2.639	2.400		0.00909	0.0100	-9.1	20.0
1,3-Dichlorobenzene	Ave	1.578	1.390	0.6000	0.00881	0.0100	-11.9	20.0
p-Isopropyltoluene	Ave	2.334	2.210		0.00947	0.0100	-5.3	20.0
1,4-Dichlorobenzene	Ave	1.642	1.460	0.5000	0.00889	0.0100	-11.1	20.0
n-Butylbenzene	Ave	1.780	1.548		0.00869	0.0100	-13.1	20.0
1,2-Dichlorobenzene	Ave	1.534	1.337	0.4000	0.00872	0.0100	-12.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-233329/8 Calibration Date: 06/06/2016 19:21

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR2594.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	0.0990	0.0869	0.0500	0.00878	0.0100	-12.2	50.0
1,2,4-Trichlorobenzene	Ave	1.012	0.7892	0.2000	0.00780	0.0100	-22.0	50.0
Hexachlorobutadiene	Lin1		0.3006		0.00735	0.0100	-26.5*	20.0
Naphthalene	Ave	2.101	1.623		0.00773	0.0100	-22.7	50.0
1,2,3-Trichlorobenzene	Lin1		0.7104		0.00802	0.0100	-19.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2482	0.2242		0.00903	0.0100	-9.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2980	0.2630		0.00883	0.0100	-11.7	20.0
Toluene-d8 (Surr)	Ave	1.377	1.271		0.00923	0.0100	-7.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5114	0.4754		0.00930	0.0100	-7.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-233329/15 Calibration Date: 06/06/2016 21:58

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 19:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 21:36

Lab File ID: UXR2601.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	0.0253	0.0238		0.0941	0.100	-5.9	20.0
Diisopropyl ether	Ave	0.2189	0.2316		0.0106	0.0100	5.8	20.0
2-Chloro-1,3-butadiene	Ave	0.3625	0.3818		0.0105	0.0100	5.3	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6109	0.6248		0.0102	0.0100	2.3	20.0
Ethyl acetate	Ave	0.1510	0.1587		0.0210	0.0200	5.1	50.0
Propionitrile	Ave	0.0308	0.0307		0.0995	0.100	-0.5	20.0
Methacrylonitrile	Ave	0.1214	0.1212		0.0998	0.100	-0.2	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.5274	0.5319		0.0101	0.0100	0.8	20.0
n-Butanol	Ave	0.0052	0.0039		0.190	0.250	-24.0*	20.0
Methyl methacrylate	Ave	0.1563	0.1625		0.0208	0.0200	3.9	20.0
2-Nitropropane	Ave	0.0305	0.0276		0.0181	0.0200	-9.5	20.0
1-Chlorohexane	Ave	0.3708	0.3767		0.0102	0.0100	1.6	20.0
Cyclohexanone	Ave	0.0117	0.0101		0.0866	0.100	-13.4	20.0
1,2,3-Trimethylbenzene	Ave	2.389	2.434		0.0102	0.0100	1.9	20.0
1,3,5-Trichlorobenzene	Ave	1.060	0.9553		0.00901	0.0100	-9.9	20.0
2-Methylnaphthalene	Ave	1.102	0.5297		0.00962	0.0200	-51.9*	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB1191.D BFB Injection Date: 08/25/2016

Instrument ID: A3UX17 BFB Injection Time: 10:07

Analysis Batch No.: 244276

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
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	103.0	
175	5.0 - 9.0 % of mass 174	6.9	(6.7) 1
176	95.0 - 101.0 % of mass 174	102.3	(99.3) 1
177	5.0 - 9.0 % of mass 176	6.3	(6.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-244276/2	UXR4113.D	08/25/2016	10:31
	LCS 240-244276/4	UXR4114.D	08/25/2016	10:54
	CCV 240-244276/3	UXR4115.D	08/25/2016	11:16
	MB 240-244276/6	UXR4117.D	08/25/2016	12:01
MSA-SW49A-081516	240-68359-45	UXR4118.D	08/25/2016	12:28
MSA-SW40A-081516	240-68359-13	UXR4119.D	08/25/2016	12:50
MSA-SW40B-081516	240-68359-14	UXR4120.D	08/25/2016	13:12
MSA-SW41A-081516	240-68359-17	UXR4121.D	08/25/2016	13:34
MSA-SW41B-081516	240-68359-18	UXR4122.D	08/25/2016	13:56
TB-081516	240-68359-41	UXR4123.D	08/25/2016	14:18
MSA-SW46A-081516	240-68359-42	UXR4124.D	08/25/2016	14:40
MSA-SW47A-081516	240-68359-43	UXR4125.D	08/25/2016	15:02
MSA-SW48A-081516	240-68359-44	UXR4126.D	08/25/2016	15:25
MSA-SW49A-081516 MS	240-68359-45 MS	UXR4127.D	08/25/2016	15:48
MSA-SW49A-081516 MSD	240-68359-45 MSD	UXR4128.D	08/25/2016	16:10

vinyl chloride only

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244276/2 Calibration Date: 08/25/2016 10:31

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR4113.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	0.3560	0.3651	0.1000	0.0103	0.0100	2.6	20.0
Chloromethane	Ave	0.3065	0.2498	0.1000	0.00815	0.0100	-18.5	20.0
Vinyl chloride	Ave	0.2814	0.2684	0.1000	0.00954	0.0100	-4.6	20.0
Butadiene	Ave	0.2521	0.1704		0.00676	0.0100	-32.4*	20.0
Bromomethane	Ave	0.0691	0.1288	0.0500	0.0187	0.0100	86.6*	20.0
Chloroethane	Ave	0.0811	0.0768	0.0500	0.00948	0.0100	-5.2	20.0
Dichlorofluoromethane	Ave	0.2750	0.4237		0.0154	0.0100	54.1*	20.0
Trichlorofluoromethane	Ave	0.2596	0.4481	0.1000	0.0173	0.0100	72.6*	20.0
Ethyl ether	Ave	0.2310	0.2253		0.00975	0.0100	-2.5	20.0
Acrolein	Ave	0.0284	0.0346		0.0609	0.0500	21.9	50.0
1,1-Dichloroethene	Ave	0.2752	0.2760	0.1000	0.0100	0.0100	0.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2389	0.2629	0.0500	0.0110	0.0100	10.0	20.0
Acetone	Lin1		0.0773	0.0100	0.0208	0.0200	3.9	50.0
Iodomethane	Ave	0.4353	0.4506		0.0104	0.0100	3.5	20.0
Carbon disulfide	Ave	0.6945	0.6606	0.1000	0.00951	0.0100	-4.9	20.0
3-Chloro-1-propene	Ave	0.1294	0.1316		0.0102	0.0100	1.6	20.0
Methyl acetate	Ave	0.1530	0.1463	0.1000	0.0478	0.0500	-4.4	20.0
Methylene Chloride	Lin1		0.2960	0.1000	0.0101	0.0100	1.2	50.0
tert-Butyl alcohol	Ave	0.0150	0.0139		0.0925	0.100	-7.5	50.0
Acrylonitrile	Ave	0.0883	0.0830		0.0940	0.100	-6.0	20.0
Methyl tert-butyl ether	Ave	0.6499	0.6949	0.1000	0.0107	0.0100	6.9	20.0
trans-1,2-Dichloroethene	Ave	0.2827	0.2930	0.1000	0.0104	0.0100	3.6	20.0
Hexane	Ave	0.0704	0.0620		0.00881	0.0100	-11.9	20.0
1,1-Dichloroethane	Ave	0.4672	0.4594	0.2000	0.00983	0.0100	-1.7	20.0
Vinyl acetate	Ave	0.3476	0.3591		0.0103	0.0100	3.3	50.0
2,2-Dichloropropane	Ave	0.1909	0.2111		0.0111	0.0100	10.6	20.0
cis-1,2-Dichloroethene	Ave	0.3038	0.3052	0.1000	0.0100	0.0100	0.5	20.0
2-Butanone	Ave	0.0952	0.0883	0.0100	0.0186	0.0200	-7.2	20.0
Bromochloromethane	Ave	0.1515	0.1632		0.0108	0.0100	7.7	20.0
Tetrahydrofuran	Ave	0.0533	0.0501		0.0188	0.0200	-6.0	20.0
Chloroform	Ave	0.4624	0.5048	0.2000	0.0109	0.0100	9.2	20.0
1,1,1-Trichloroethane	Ave	0.3131	0.3740	0.1000	0.0119	0.0100	19.4	20.0
Cyclohexane	Ave	0.4247	0.3696	0.1000	0.00870	0.0100	-13.0	20.0
1,1-Dichloropropene	Ave	0.3777	0.3732		0.00988	0.0100	-1.2	20.0
Carbon tetrachloride	Ave	0.2855	0.3764	0.1000	0.0132	0.0100	31.8*	20.0
Isobutyl alcohol	Ave	0.0075	0.0065		0.218	0.250	-12.8	20.0
Benzene	Ave	1.161	1.068	0.5000	0.00920	0.0100	-8.0	20.0
1,2-Dichloroethane	Ave	0.3608	0.4278	0.1000	0.0119	0.0100	18.6	20.0
n-Heptane	Ave	0.0594	0.0585		0.00985	0.0100	-1.5	20.0
Trichloroethene	Ave	0.3222	0.3379	0.1500	0.0105	0.0100	4.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244276/2 Calibration Date: 08/25/2016 10:31

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR4113.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	0.4026	0.3713	0.1000	0.00922	0.0100	-7.8	20.0
1,2-Dichloropropane	Ave	0.2473	0.2248	0.1000	0.00909	0.0100	-9.1	20.0
1,4-Dioxane	Ave	0.0029	0.0021		0.146	0.200	-27.1	50.0
Dibromomethane	Ave	0.1470	0.1615		0.0110	0.0100	9.9	20.0
Bromodichloromethane	Ave	0.2699	0.3166	0.1500	0.0117	0.0100	17.3	20.0
2-Chloroethyl vinyl ether	Ave	0.1373	0.1343		0.0196	0.0200	-2.2	20.0
cis-1,3-Dichloropropene	Ave	0.3372	0.3400	0.1500	0.0101	0.0100	0.8	20.0
4-Methyl-2-pentanone	Ave	0.1690	0.1728	0.0500	0.0205	0.0200	2.3	20.0
Toluene	Ave	1.624	1.537	0.4000	0.00947	0.0100	-5.3	20.0
trans-1,3-Dichloropropene	Ave	0.3595	0.3858	0.1000	0.0107	0.0100	7.3	20.0
Ethyl methacrylate	Ave	0.3684	0.3784		0.0103	0.0100	2.7	20.0
1,1,2-Trichloroethane	Ave	0.3025	0.3131	0.1000	0.0104	0.0100	3.5	20.0
Tetrachloroethene	Ave	0.3511	0.3934	0.1500	0.0112	0.0100	12.0	20.0
1,3-Dichloropropane	Ave	0.5438	0.5179		0.00952	0.0100	-4.8	20.0
2-Hexanone	Ave	0.1570	0.1573	0.0500	0.0200	0.0200	0.2	20.0
Dibromochloromethane	Ave	0.2565	0.3140		0.0122	0.0100	22.4*	20.0
1,2-Dibromoethane	Ave	0.2852	0.3077		0.0108	0.0100	7.9	20.0
Chlorobenzene	Ave	1.093	1.068	0.3000	0.00978	0.0100	-2.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3183	0.3637		0.0114	0.0100	14.3	20.0
Ethylbenzene	Ave	0.5549	0.5425		0.00978	0.0100	-2.2	20.0
m-Xylene & p-Xylene	Ave	0.7358	0.6881		0.00935	0.0100	-6.5	20.0
o-Xylene	Ave	0.6642	0.6581		0.00991	0.0100	-0.9	20.0
Styrene	Ave	1.083	1.129	0.3000	0.0104	0.0100	4.3	20.0
Bromoform	Ave	0.1458	0.1880	0.1000	0.0129	0.0100	29.0*	20.0
Isopropylbenzene	Ave	1.611	1.659	0.1000	0.0103	0.0100	3.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6392	0.5697	0.3000	0.00891	0.0100	-10.9	20.0
Bromobenzene	Ave	0.8753	0.8875		0.0101	0.0100	1.4	20.0
1,2,3-Trichloropropane	Ave	0.2282	0.2446		0.0107	0.0100	7.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1403	0.1185		0.00845	0.0100	-15.5	20.0
n-Propylbenzene	Ave	0.7932	0.7661		0.00966	0.0100	-3.4	20.0
2-Chlorotoluene	Ave	0.7477	0.7010		0.00938	0.0100	-6.2	20.0
1,3,5-Trimethylbenzene	Ave	2.374	2.303		0.00970	0.0100	-3.0	20.0
4-Chlorotoluene	Ave	0.7933	0.7606		0.00959	0.0100	-4.1	20.0
tert-Butylbenzene	Ave	2.050	1.940		0.00946	0.0100	-5.4	20.0
1,2,4-Trimethylbenzene	Ave	2.464	2.379		0.00966	0.0100	-3.4	20.0
sec-Butylbenzene	Ave	2.639	2.382		0.00903	0.0100	-9.7	20.0
1,3-Dichlorobenzene	Ave	1.578	1.541	0.6000	0.00976	0.0100	-2.4	20.0
p-Isopropyltoluene	Ave	2.334	2.252		0.00965	0.0100	-3.5	20.0
1,4-Dichlorobenzene	Ave	1.642	1.565	0.5000	0.00953	0.0100	-4.7	20.0
n-Butylbenzene	Ave	1.780	1.474		0.00828	0.0100	-17.2	20.0
1,2-Dichlorobenzene	Ave	1.534	1.434	0.4000	0.00935	0.0100	-6.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244276/2 Calibration Date: 08/25/2016 10:31

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR4113.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	0.0990	0.0919	0.0500	0.00928	0.0100	-7.2	50.0
1,2,4-Trichlorobenzene	Ave	1.012	0.6480	0.2000	0.00640	0.0100	-36.0	50.0
Hexachlorobutadiene	Lin1		0.3203		0.00788	0.0100	-21.2*	20.0
Naphthalene	Ave	2.101	1.237		0.00589	0.0100	-41.1	50.0
1,2,3-Trichlorobenzene	Lin1		0.5826		0.00649	0.0100	-35.1*	20.0
Dibromofluoromethane (Surr)	Ave	0.2482	0.2589		0.0104	0.0100	4.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2980	0.3281		0.0110	0.0100	10.1	20.0
Toluene-d8 (Surr)	Ave	1.377	1.261		0.00916	0.0100	-8.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5114	0.4921		0.00962	0.0100	-3.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCV 240-244276/3 Calibration Date: 08/25/2016 11:16

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 19:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 21:36

Lab File ID: UXR4115.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	0.0253	0.0227		0.0899	0.100	-10.1	20.0
Diisopropyl ether	Ave	0.2189	0.2196		0.0100	0.0100	0.3	20.0
2-Chloro-1,3-butadiene	Ave	0.3625	0.3952		0.0109	0.0100	9.0	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6109	0.6263		0.0103	0.0100	2.5	20.0
Ethyl acetate	Ave	0.1510	0.1777		0.0235	0.0200	17.6	50.0
Propionitrile	Ave	0.0308	0.0308		0.0999	0.100	-0.1	20.0
Methacrylonitrile	Ave	0.1214	0.1269		0.104	0.100	4.5	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.5274	0.5753		0.0109	0.0100	9.1	20.0
n-Butanol	Ave	0.0052	0.0049		0.238	0.250	-4.8	20.0
Methyl methacrylate	Ave	0.1563	0.1841		0.0235	0.0200	17.7	20.0
2-Nitropropane	Ave	0.0305	0.0384		0.0251	0.0200	25.7*	20.0
1-Chlorohexane	Ave	0.3708	0.3667		0.00989	0.0100	-1.1	20.0
Cyclohexanone	Ave	0.0117	0.0102		0.0867	0.100	-13.3	20.0
1,2,3-Trimethylbenzene	Ave	2.389	2.437		0.0102	0.0100	2.0	20.0
1,3,5-Trichlorobenzene	Ave	1.060	1.007		0.00950	0.0100	-5.0	20.0
2-Methylnaphthalene	Ave	1.102	0.5231		0.00949	0.0200	-52.5*	20.0

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: BFB1192.D BFB Injection Date: 08/26/2016

Instrument ID: A3UX17 BFB Injection Time: 10:10

Analysis Batch No.: 244438

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	51.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	101.4	
175	5.0 - 9.0 % of mass 174	6.8	(6.7) 1
176	95.0 - 101.0 % of mass 174	100.3	(98.9) 1
177	5.0 - 9.0 % of mass 176	5.0	(5.0) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-244438/2	UXR4142.D	08/26/2016	10:42
	CCV 240-244438/3	UXR4143.D	08/26/2016	11:04
	LCS 240-244438/4	UXR4144.D	08/26/2016	11:27
	LCSD 240-244438/5	UXR4145.D	08/26/2016	11:49
	MB 240-244438/7	UXR4147.D	08/26/2016	12:34
EL-SW01D-081516	240-68359-40	UXR4148.D	08/26/2016	12:56

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244438/2 Calibration Date: 08/26/2016 10:42

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR4142.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	0.3560	0.3633	0.1000	0.0102	0.0100	2.1	20.0
Chloromethane	Ave	0.3065	0.2435	0.1000	0.00794	0.0100	-20.6*	20.0
Vinyl chloride	Ave	0.2814	0.2793	0.1000	0.00992	0.0100	-0.8	20.0
Butadiene	Ave	0.2521	0.1591		0.00631	0.0100	-36.9*	20.0
Bromomethane	Ave	0.0691	0.1209	0.0500	0.0175	0.0100	75.0*	20.0
Chloroethane	Ave	0.0811	0.0599	0.0500	0.00739	0.0100	-26.1*	20.0
Dichlorofluoromethane	Ave	0.2750	0.3902		0.0142	0.0100	41.9*	20.0
Trichlorofluoromethane	Ave	0.2596	0.4247	0.1000	0.0164	0.0100	63.6*	20.0
Ethyl ether	Ave	0.2310	0.2311		0.0100	0.0100	0.0	20.0
Acrolein	Ave	0.0284	0.0299		0.0527	0.0500	5.4	50.0
1,1-Dichloroethene	Ave	0.2752	0.2830	0.1000	0.0103	0.0100	2.8	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2389	0.2631	0.0500	0.0110	0.0100	10.1	20.0
Acetone	Lin1		0.0752	0.0100	0.0202	0.0200	0.8	50.0
Iodomethane	Ave	0.4353	0.4964		0.0114	0.0100	14.0	20.0
Carbon disulfide	Ave	0.6945	0.7084	0.1000	0.0102	0.0100	2.0	20.0
3-Chloro-1-propene	Ave	0.1294	0.1321		0.0102	0.0100	2.0	20.0
Methyl acetate	Ave	0.1530	0.1443	0.1000	0.0472	0.0500	-5.7	20.0
Methylene Chloride	Lin1		0.2985	0.1000	0.0102	0.0100	2.1	50.0
tert-Butyl alcohol	Ave	0.0150	0.0145		0.0966	0.100	-3.4	50.0
Acrylonitrile	Ave	0.0883	0.0847		0.0960	0.100	-4.0	20.0
Methyl tert-butyl ether	Ave	0.6499	0.7081	0.1000	0.0109	0.0100	9.0	20.0
trans-1,2-Dichloroethene	Ave	0.2827	0.3016	0.1000	0.0107	0.0100	6.7	20.0
Hexane	Ave	0.0704	0.0672		0.00955	0.0100	-4.5	20.0
1,1-Dichloroethane	Ave	0.4672	0.4585	0.2000	0.00981	0.0100	-1.9	20.0
Vinyl acetate	Ave	0.3476	0.3651		0.0105	0.0100	5.0	50.0
2,2-Dichloropropane	Ave	0.1909	0.2230		0.0117	0.0100	16.8	20.0
cis-1,2-Dichloroethene	Ave	0.3038	0.3086	0.1000	0.0102	0.0100	1.6	20.0
2-Butanone	Ave	0.0952	0.0870	0.0100	0.0183	0.0200	-8.5	20.0
Bromochloromethane	Ave	0.1515	0.1698		0.0112	0.0100	12.1	20.0
Tetrahydrofuran	Ave	0.0533	0.0484		0.0182	0.0200	-9.2	20.0
Chloroform	Ave	0.4624	0.5138	0.2000	0.0111	0.0100	11.1	20.0
1,1,1-Trichloroethane	Ave	0.3131	0.3871	0.1000	0.0124	0.0100	23.6*	20.0
Cyclohexane	Ave	0.4247	0.3768	0.1000	0.00887	0.0100	-11.3	20.0
1,1-Dichloropropene	Ave	0.3777	0.3813		0.0101	0.0100	0.9	20.0
Carbon tetrachloride	Ave	0.2855	0.3658	0.1000	0.0128	0.0100	28.1*	20.0
Isobutyl alcohol	Ave	0.0075	0.0072		0.241	0.250	-3.4	20.0
Benzene	Ave	1.161	1.123	0.5000	0.00967	0.0100	-3.3	20.0
1,2-Dichloroethane	Ave	0.3608	0.4276	0.1000	0.0119	0.0100	18.5	20.0
n-Heptane	Ave	0.0594	0.0593		0.00998	0.0100	-0.2	20.0
Trichloroethene	Ave	0.3222	0.3428	0.1500	0.0106	0.0100	6.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244438/2 Calibration Date: 08/26/2016 10:42

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR4142.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	0.4026	0.3836	0.1000	0.00953	0.0100	-4.7	20.0
1,2-Dichloropropane	Ave	0.2473	0.2307	0.1000	0.00933	0.0100	-6.7	20.0
1,4-Dioxane	Ave	0.0029	0.0026		0.181	0.200	-9.6	50.0
Dibromomethane	Ave	0.1470	0.1605		0.0109	0.0100	9.2	20.0
Bromodichloromethane	Ave	0.2699	0.3138	0.1500	0.0116	0.0100	16.3	20.0
2-Chloroethyl vinyl ether	Ave	0.1373	0.1330		0.0194	0.0200	-3.1	20.0
cis-1,3-Dichloropropene	Ave	0.3372	0.3518	0.1500	0.0104	0.0100	4.3	20.0
4-Methyl-2-pentanone	Ave	0.1690	0.1729	0.0500	0.0205	0.0200	2.3	20.0
Toluene	Ave	1.624	1.584	0.4000	0.00975	0.0100	-2.5	20.0
trans-1,3-Dichloropropene	Ave	0.3595	0.3875	0.1000	0.0108	0.0100	7.8	20.0
Ethyl methacrylate	Ave	0.3684	0.3774		0.0102	0.0100	2.5	20.0
1,1,2-Trichloroethane	Ave	0.3025	0.3029	0.1000	0.0100	0.0100	0.2	20.0
Tetrachloroethene	Ave	0.3511	0.4021	0.1500	0.0115	0.0100	14.5	20.0
1,3-Dichloropropane	Ave	0.5438	0.5354		0.00985	0.0100	-1.5	20.0
2-Hexanone	Ave	0.1570	0.1513	0.0500	0.0193	0.0200	-3.6	20.0
Dibromochloromethane	Ave	0.2565	0.2967		0.0116	0.0100	15.7	20.0
1,2-Dibromoethane	Ave	0.2852	0.3049		0.0107	0.0100	6.9	20.0
Chlorobenzene	Ave	1.093	1.089	0.3000	0.00996	0.0100	-0.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3183	0.3635		0.0114	0.0100	14.2	20.0
Ethylbenzene	Ave	0.5549	0.5583		0.0101	0.0100	0.6	20.0
m-Xylene & p-Xylene	Ave	0.7358	0.6965		0.00947	0.0100	-5.3	20.0
o-Xylene	Ave	0.6642	0.6751		0.0102	0.0100	1.6	20.0
Styrene	Ave	1.083	1.156	0.3000	0.0107	0.0100	6.7	20.0
Bromoform	Ave	0.1458	0.1861	0.1000	0.0128	0.0100	27.6*	20.0
Isopropylbenzene	Ave	1.611	1.704	0.1000	0.0106	0.0100	5.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6392	0.5770	0.3000	0.00903	0.0100	-9.7	20.0
Bromobenzene	Ave	0.8753	0.8738		0.00998	0.0100	-0.2	20.0
1,2,3-Trichloropropane	Ave	0.2282	0.2303		0.0101	0.0100	0.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1403	0.1321		0.00942	0.0100	-5.8	20.0
n-Propylbenzene	Ave	0.7932	0.8007		0.0101	0.0100	0.9	20.0
2-Chlorotoluene	Ave	0.7477	0.7152		0.00956	0.0100	-4.4	20.0
1,3,5-Trimethylbenzene	Ave	2.374	2.376		0.0100	0.0100	0.0	20.0
4-Chlorotoluene	Ave	0.7933	0.7709		0.00972	0.0100	-2.8	20.0
tert-Butylbenzene	Ave	2.050	2.015		0.00983	0.0100	-1.7	20.0
1,2,4-Trimethylbenzene	Ave	2.464	2.445		0.00993	0.0100	-0.7	20.0
sec-Butylbenzene	Ave	2.639	2.448		0.00927	0.0100	-7.3	20.0
1,3-Dichlorobenzene	Ave	1.578	1.571	0.6000	0.00995	0.0100	-0.5	20.0
p-Isopropyltoluene	Ave	2.334	2.318		0.00993	0.0100	-0.7	20.0
1,4-Dichlorobenzene	Ave	1.642	1.594	0.5000	0.00971	0.0100	-2.9	20.0
n-Butylbenzene	Ave	1.780	1.570		0.00882	0.0100	-11.8	20.0
1,2-Dichlorobenzene	Ave	1.534	1.473	0.4000	0.00960	0.0100	-4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCVIS 240-244438/2 Calibration Date: 08/26/2016 10:42

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 17:07

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 18:59

Lab File ID: UXR4142.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	0.0990	0.0957	0.0500	0.00966	0.0100	-3.4	50.0
1,2,4-Trichlorobenzene	Ave	1.012	0.7706	0.2000	0.00761	0.0100	-23.9	50.0
Hexachlorobutadiene	Lin1		0.3736		0.00933	0.0100	-6.7	20.0
Naphthalene	Ave	2.101	1.398		0.00666	0.0100	-33.4	50.0
1,2,3-Trichlorobenzene	Lin1		0.7360		0.00833	0.0100	-16.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2482	0.2544		0.0102	0.0100	2.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2980	0.3210		0.0108	0.0100	7.7	20.0
Toluene-d8 (Surr)	Ave	1.377	1.271		0.00923	0.0100	-7.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5114	0.4884		0.00955	0.0100	-4.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCV 240-244438/3 Calibration Date: 08/26/2016 11:04

Instrument ID: A3UX17 Calib Start Date: 06/06/2016 19:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/06/2016 21:36

Lab File ID: UXR4143.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	0.0253	0.0236		0.0931	0.100	-6.9	20.0
Diisopropyl ether	Ave	0.2189	0.2270		0.0104	0.0100	3.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3625	0.4079		0.0113	0.0100	12.5	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6109	0.6366		0.0104	0.0100	4.2	20.0
Ethyl acetate	Ave	0.1510	0.1789		0.0237	0.0200	18.5	50.0
Propionitrile	Ave	0.0308	0.0306		0.0991	0.100	-0.9	20.0
Methacrylonitrile	Ave	0.1214	0.1298		0.107	0.100	6.9	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.5274	0.5812		0.0110	0.0100	10.2	20.0
n-Butanol	Ave	0.0052	0.0046		0.220	0.250	-12.1	20.0
Methyl methacrylate	Ave	0.1563	0.1890		0.0242	0.0200	20.9*	20.0
2-Nitropropane	Ave	0.0305	0.0365		0.0239	0.0200	19.4	20.0
1-Chlorohexane	Ave	0.3708	0.3650		0.00984	0.0100	-1.6	20.0
Cyclohexanone	Ave	0.0117	0.0097		0.0831	0.100	-16.9	20.0
1,2,3-Trimethylbenzene	Ave	2.389	2.437		0.0102	0.0100	2.0	20.0
1,3,5-Trichlorobenzene	Ave	1.060	0.9676		0.00913	0.0100	-8.7	20.0
2-Methylnaphthalene	Ave	1.102	0.4629		0.00840	0.0200	-58.0*	20.0

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
MSA-SW38A-081516	240-68359-5	26	16	59	63	52	44
MSA-SW40A-081516	240-68359-13	41	25	81	77	65	56
MSA-SW41A-081516	240-68359-17	39	23	79	76	60	56
MSA-SW42A-081516	240-68359-21	39	23	84	79	77	53
MSA-SW46A-081516	240-68359-42	33	19	76	71	63	48
MSA-SW47A-081516	240-68359-43	39	22	77	76	60	47
MSA-SW48A-081516	240-68359-44	41	25	77	75	65	59
MSA-SW49A-081516	240-68359-45	37	21	79	79	66	57
	MB 240-242932/13-A	75	64	80	83	73	93
	LCS 240-242932/14-A	81	70	98	88	88	96

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-120
PHL = Phenol-d5 (Surr)	10-120
NBZ = Nitrobenzene-d5 (Surr)	36-120
FBP = 2-Fluorobiphenyl (Surr)	42-120
TBP = 2,4,6-Tribromophenol (Surr)	35-125
TPHL = Terphenyl-d14 (Surr)	17-120

Column to be used to flag recovery values

FORM II 8270D

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: STD6 240-242308/10 Date Analyzed: 08/12/2016 14:02

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 60812010.D Heated Purge: (Y/N) N

Calibration ID: 35648

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		143834	6.51	565397	7.62	295706	9.13
UPPER LIMIT		287668	7.01	1130794	8.12	591412	9.63
LOWER LIMIT		71917	6.01	282699	7.12	147853	8.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-242308/11		153452	6.51	590315	7.63	311758	9.14
CCV 240-243319/2 CCVIS		145990	6.38	595765	7.50	307087	9.00

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

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 8270D

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: STD6 240-242308/10 Date Analyzed: 08/12/2016 14:02

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 60812010.D Heated Purge: (Y/N) N

Calibration ID: 35648

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		436417	10.41	488638	12.74	366174	14.64
UPPER LIMIT		872834	10.91	977276	13.24	732348	15.14
LOWER LIMIT		218209	9.91	244319	12.24	183087	14.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-242308/11		454709	10.41	521363	12.74	396544	14.64
CCV 240-243319/2 CCVIS		519129	10.27	485388	12.55	373337	14.33

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

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 8270D

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCV 240-243319/2 Date Analyzed: 08/19/2016 07:43

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 60819002.D Heated Purge: (Y/N) N

Calibration ID: 35654

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		145990	6.38	595765	7.50	307087	9.00
UPPER LIMIT		291980	6.88	1191530	8.00	614174	9.50
LOWER LIMIT		72995	5.88	297883	7.00	153544	8.50
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-243319/3		132657	6.38	538815	7.50	275813	9.00
MB 240-242932/13-A		109373	6.38	444761	7.50	228176	9.00
LCS 240-242932/14-A		106225	6.38	426124	7.49	224744	9.00
240-68359-5	MSA-SW38A-081516	98175	6.38	393441	7.50	202190	9.00
240-68359-13	MSA-SW40A-081516	96971	6.38	387693	7.50	203313	9.00
240-68359-17	MSA-SW41A-081516	95267	6.38	399575	7.50	204524	9.00
240-68359-21	MSA-SW42A-081516	95523	6.38	383425	7.50	205700	9.00
240-68359-42	MSA-SW46A-081516	108276	6.38	411367	7.50	216937	9.00
240-68359-43	MSA-SW47A-081516	93960	6.38	376365	7.50	195537	9.00
240-68359-44	MSA-SW48A-081516	99773	6.38	383362	7.50	201005	9.00
240-68359-45	MSA-SW49A-081516	103349	6.38	409097	7.50	211297	9.00

DCBd4 = 1,4-Dichlorobenzene-d4
DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
NPT = Naphthalene-d8
Area Limit = 50%-200% of internal standard area
ANT = Acenaphthene-d10
RT Limit = ± 0.5 minutes of internal standard RT
ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Sample No.: CCV 240-243319/2 Date Analyzed: 08/19/2016 07:43

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.25(mm)

Lab File ID (Standard): 60819002.D Heated Purge: (Y/N) N

Calibration ID: 35654

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		519129	10.27	485388	12.55	373337	14.33
UPPER LIMIT		1038258	10.77	970776	13.05	746674	14.83
LOWER LIMIT		259565	9.77	242694	12.05	186669	13.83
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-243319/3		468522	10.27	430464	12.55	335583	14.33
MB 240-242932/13-A		408117	10.27	365823	12.55	260594	14.33
LCS 240-242932/14-A		389752	10.26	376221	12.55	251507	14.33
240-68359-5	MSA-SW38A-081516	352193	10.27	326513	12.55	221803	14.33
240-68359-13	MSA-SW40A-081516	348142	10.27	330353	12.56	222664	14.33
240-68359-17	MSA-SW41A-081516	355286	10.27	335129	12.55	235574	14.33
240-68359-21	MSA-SW42A-081516	346908	10.27	336314	12.56	241709	14.33
240-68359-42	MSA-SW46A-081516	374409	10.27	349733	12.55	245170	14.33
240-68359-43	MSA-SW47A-081516	332527	10.27	302404	12.55	209047	14.33
240-68359-44	MSA-SW48A-081516	338809	10.27	323473	12.55	217203	14.33
240-68359-45	MSA-SW49A-081516	366891	10.27	340270	12.55	233599	14.33

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
PRY = Perylene-d12
PRY = Perylene-d12

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 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: 60819004.D Lab Sample ID: MB 240-242932/13-A

Matrix: Water Date Extracted: 08/17/2016 07:44

Instrument ID: A4HP9 Date Analyzed: 08/19/2016 08:35

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-242932/14-A	60819005.D	08/19/2016 09:01
MSA-SW38A-081516	240-68359-5	60819019.D	08/19/2016 15:01
MSA-SW40A-081516	240-68359-13	60819020.D	08/19/2016 15:27
MSA-SW41A-081516	240-68359-17	60819021.D	08/19/2016 15:53
MSA-SW42A-081516	240-68359-21	60819022.D	08/19/2016 16:19
MSA-SW46A-081516	240-68359-42	60819023.D	08/19/2016 16:45
MSA-SW47A-081516	240-68359-43	60819024.D	08/19/2016 17:11
MSA-SW48A-081516	240-68359-44	60819025.D	08/19/2016 17:36
MSA-SW49A-081516	240-68359-45	60819026.D	08/19/2016 18:02

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 60819005.D

Lab ID: LCS 240-242932/14-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	13.0	65	15-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: 60812001.D DFTPP Injection Date: 08/12/2016

Instrument ID: A4HP9 DFTPP Injection Time: 10:11

Analysis Batch No.: 242308

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	55.7	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	59.8	
70	Less than 2.0% of mass 69	0.2	(0.4) 1
127	25.0 - 75.0% of mass 198	60.7	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0- 30.0% of mass 198	22.4	
365	Greater than 0.75% of mass 198	3.3	
441	Present, but less than mass 443	10.3	
442	40.0 - 110.0% of mass 198	64.0	
443	15.0 - 24.0% of mass 442	11.9	(18.5) 2

1-Value is % mass 69 2-Value is % mass 442

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
	STD5 240-242308/2	60812002.D	08/12/2016	10:35
	STD4 240-242308/3	60812003.D	08/12/2016	11:00
	STD3 240-242308/4	60812004.D	08/12/2016	11:26
	STD2 240-242308/5	60812005.D	08/12/2016	11:52
	STD1 240-242308/6	60812006.D	08/12/2016	12:18
	STD9 240-242308/7	60812007.D	08/12/2016	12:44
	STD8 240-242308/8	60812008.D	08/12/2016	13:10
	STD7 240-242308/9	60812009.D	08/12/2016	13:36
	STD6 240-242308/10	60812010.D	08/12/2016	14:02
	ICV 240-242308/11	60812011.D	08/12/2016	14:28

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

Lab Name: TestAmerica Canton Job No.: 240-68359-1 Analy Batch No.: 242308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/12/2016 10:35 Calibration End Date: 08/12/2016 14:02 Calibration ID: 35648

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-242308/6	60812006.D
Level 2	STD2 240-242308/5	60812005.D
Level 3	STD3 240-242308/4	60812004.D
Level 4	STD4 240-242308/3	60812003.D
Level 5	STD5 240-242308/2	60812002.D
Level 6	STD6 240-242308/10	60812010.D
Level 7	STD7 240-242308/9	60812009.D
Level 8	STD8 240-242308/8	60812008.D
Level 9	STD9 240-242308/7	60812007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.6509	0.6492 0.6430	0.6486 0.6407	0.6251 0.6631	0.6089	Ave		0.6412				2.6		20.0			
N-Nitrosodimethylamine	0.9691	0.9656 1.0020	0.9660 1.0073	0.9695 1.0491	0.9746	Ave		0.9879				3.0		20.0			
Pyridine	1.8589	1.5951 1.8068	1.8407 1.8069	1.7151 1.9243	1.8201	Ave		1.7960				5.6		20.0			
Benzaldehyde	1.4855	1.5427 1.4635	1.5536 1.3560	1.4701 1.3931	1.4590	Ave		1.4654			0.0100	4.6		20.0			
Phenol	2.0449	1.9524 1.9891	1.9723 1.9674	1.9921 2.0649	2.0971	Ave		2.0100			0.8000	2.6		20.0			
Aniline	2.5010	2.5868 2.4965	2.4187 2.4363	2.3449 2.5495	2.4890	Ave		2.4778				3.1		20.0			
Bis(2-chloroethyl)ether	1.6740	1.6944 1.6595	1.6455 1.6552	1.5778 1.6568	1.6290	Ave		1.6490			0.7000	2.1		20.0			
2-Chlorophenol	1.3697	1.3794 1.3759	1.3035 1.3561	1.3374 1.3991	1.4072	Ave		1.3660			0.8000	2.5		20.0			
n-Decane	1.9028	2.0443 1.8639	1.8788 1.8236	1.9154 1.8803	1.9347	Ave		1.9055				3.4		20.0			
1,3-Dichlorobenzene	1.4705	1.5323 1.4355	1.4568 1.4388	1.3723 1.4864	1.4582	Ave		1.4563				3.1		20.0			
1,4-Dichlorobenzene	1.4848	1.5400 1.4779	1.5832 1.4483	1.4091 1.5046	1.5136	Ave		1.4952				3.6		20.0			
Benzyl alcohol	1.0506	1.0698 1.0557	1.1119 1.0444	1.0613 1.1067	1.0797	Ave		1.0725				2.4		20.0			
1,2-Dichlorobenzene	1.3852	1.4387 1.3867	1.4061 1.3384	1.3570 1.4017	1.3708	Ave		1.3856				2.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICV 240-242308/11 Calibration Date: 08/12/2016 14:28

Instrument ID: A4HP9 Calib Start Date: 08/12/2016 10:35

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 08/12/2016 14:02

Lab File ID: 60812011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6412	0.5908		9.21	10.0	-7.9	30.0
N-Nitrosodimethylamine	Ave	0.9879	0.8074		8.17	10.0	-18.3	30.0
Pyridine	Ave	1.796	1.774		9.88	10.0	-1.2	30.0
Benzaldehyde	Ave	1.465	1.435	0.0100	19.6	20.0	-2.1	30.0
Phenol	Ave	2.010	1.932	0.8000	9.61	10.0	-3.9	30.0
Aniline	Ave	2.478	2.401		9.69	10.0	-3.1	30.0
Bis(2-chloroethyl)ether	Ave	1.649	1.551	0.7000	9.40	10.0	-6.0	30.0
2-Chlorophenol	Ave	1.366	1.301	0.8000	9.53	10.0	-4.7	30.0
n-Decane	Ave	1.905	1.804		9.47	10.0	-5.3	30.0
1,3-Dichlorobenzene	Ave	1.456	1.386		9.51	10.0	-4.9	30.0
1,4-Dichlorobenzene	Ave	1.495	1.406		9.40	10.0	-6.0	30.0
Benzyl alcohol	Ave	1.072	1.020		9.51	10.0	-4.9	30.0
1,2-Dichlorobenzene	Ave	1.386	1.321		9.53	10.0	-4.7	30.0
2-Methylphenol	Ave	1.449	1.451	0.7000	10.0	10.0	0.1	30.0
bis (2-chloroisopropyl) ether	Ave	2.067	1.979		9.58	10.0	-4.2	30.0
Indene	Ave	2.664	2.302		17.3	20.0	-13.6	30.0
3 & 4 Methylphenol	Ave	1.539	1.452		9.43	10.0	-5.7	30.0
N-Nitrosodi-n-propylamine	Ave	1.245	1.186	0.5000	9.52	10.0	-4.8	30.0
Acetophenone	Ave	2.208	2.096	0.0100	9.49	10.0	-5.1	30.0
Hexachloroethane	Ave	0.7046	0.6698	0.3000	9.51	10.0	-4.9	30.0
Nitrobenzene	Ave	0.5286	0.5375	0.2000	10.2	10.0	1.7	30.0
Isophorone	Ave	0.8671	0.8841	0.4000	10.2	10.0	2.0	30.0
2,4-Dimethylphenol	Ave	0.4258	0.4131	0.2000	9.70	10.0	-3.0	30.0
2-Nitrophenol	Ave	0.1796	0.1716	0.1000	9.55	10.0	-4.5	30.0
Benzoic acid	Lin1		0.1988		19.1	20.0	-4.3	30.0
Bis(2-chloroethoxy)methane	Ave	0.4621	0.4532	0.3000	9.81	10.0	-1.9	30.0
2,4-Dichlorophenol	Ave	0.2544	0.2491	0.2000	9.79	10.0	-2.1	30.0
1,2,4-Trichlorobenzene	Ave	0.2943	0.2774		9.43	10.0	-5.7	30.0
Naphthalene	Ave	1.033	0.998	0.7000	9.66	10.0	-3.4	30.0
4-Chloroaniline	Ave	0.4454	0.4196	0.0100	9.42	10.0	-5.8	30.0
2,6-Dichlorophenol	Ave	0.2529	0.2533		10.0	10.0	0.1	30.0
Hexachlorobutadiene	Ave	0.1749	0.1772	0.0100	10.1	10.0	1.3	30.0
Caprolactam	Ave	0.1055	0.1077	0.0100	20.4	20.0	2.0	30.0
4-Chloro-3-methylphenol	Ave	0.3457	0.3553	0.2000	10.3	10.0	2.8	30.0
2-Methylnaphthalene	Ave	0.6462	0.6267	0.4000	9.70	10.0	-3.0	30.0
1-Methylnaphthalene	Ave	0.6098	0.5830		9.56	10.0	-4.4	30.0
Hexachlorocyclopentadiene	Ave	0.3301	0.3181	0.0500	9.63	10.0	-3.7	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4757	0.4637	0.0100	9.75	10.0	-2.5	30.0
2,4,6-Trichlorophenol	Ave	0.3285	0.3436	0.2000	10.5	10.0	4.6	30.0
2,4,5-Trichlorophenol	Ave	0.3252	0.3650	0.2000	11.2	10.0	12.3	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab File ID: 60819001.D DFTPP Injection Date: 08/19/2016

Instrument ID: A4HP9 DFTPP Injection Time: 07:23

Analysis Batch No.: 243319

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0- 80.0% of mass 198	56.4
68	Less than 2.0% of mass 69	0.1 (0.2) 1
69	Mass 69 relative abundance	61.0
70	Less than 2.0% of mass 69	0.4 (0.6) 1
127	25.0 - 75.0% of mass 198	61.6
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0- 30.0% of mass 198	22.9
365	Greater than 0.75% of mass 198	4.0
441	Present, but less than mass 443	10.8
442	40.0 - 110.0% of mass 198	69.4
443	15.0 - 24.0% of mass 442	13.6 (19.6) 2

1-Value is % mass 69 2-Value is % mass 442

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 240-243319/2	60819002.D	08/19/2016	07:43
	CCV 240-243319/3	60819003.D	08/19/2016	08:09
	MB 240-242932/13-A	60819004.D	08/19/2016	08:35
	LCS 240-242932/14-A	60819005.D	08/19/2016	09:01
MSA-SW38A-081516	240-68359-5	60819019.D	08/19/2016	15:01
MSA-SW40A-081516	240-68359-13	60819020.D	08/19/2016	15:27
MSA-SW41A-081516	240-68359-17	60819021.D	08/19/2016	15:53
MSA-SW42A-081516	240-68359-21	60819022.D	08/19/2016	16:19
MSA-SW46A-081516	240-68359-42	60819023.D	08/19/2016	16:45
MSA-SW47A-081516	240-68359-43	60819024.D	08/19/2016	17:11
MSA-SW48A-081516	240-68359-44	60819025.D	08/19/2016	17:36
MSA-SW49A-081516	240-68359-45	60819026.D	08/19/2016	18:02

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: CCV 240-243319/2 Calibration Date: 08/19/2016 07:43

Instrument ID: A4HP9 Calib Start Date: 08/12/2016 10:35

GC Column: RXI-5SILMS ID: 0.25(mm) Calib End Date: 08/12/2016 14:02

Lab File ID: 60819002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6412	0.6891		10.7	10.0	7.5	20.0
N-Nitrosodimethylamine	Ave	0.9879	1.079		10.9	10.0	9.3	20.0
Pyridine	Ave	1.796	1.995		11.1	10.0	11.1	20.0
Benzaldehyde	Ave	1.465	1.525	0.0100	20.8	20.0	4.0	20.0
Phenol	Ave	2.010	2.109	0.8000	10.5	10.0	4.9	20.0
Aniline	Ave	2.478	2.564		10.3	10.0	3.5	20.0
Bis(2-chloroethyl)ether	Ave	1.649	1.744	0.7000	10.6	10.0	5.8	20.0
2-Chlorophenol	Ave	1.366	1.410	0.8000	10.3	10.0	3.2	20.0
n-Decane	Ave	1.905	2.088		11.0	10.0	9.6	20.0
1,3-Dichlorobenzene	Ave	1.456	1.497		10.3	10.0	2.8	20.0
1,4-Dichlorobenzene	Ave	1.495	1.487		9.94	10.0	-0.6	20.0
Benzyl alcohol	Ave	1.072	1.073		10.0	10.0	0.0	20.0
1,2-Dichlorobenzene	Ave	1.386	1.395		10.1	10.0	0.7	20.0
2-Methylphenol	Ave	1.449	1.527	0.7000	10.5	10.0	5.4	20.0
bis (2-chloroisopropyl) ether	Ave	2.067	2.263		11.0	10.0	9.5	20.0
Indene	Ave	2.664	2.767		20.8	20.0	3.9	20.0
3 & 4 Methylphenol	Ave	1.539	1.574		10.2	10.0	2.3	20.0
N-Nitrosodi-n-propylamine	Ave	1.245	1.355	0.5000	10.9	10.0	8.8	20.0
Acetophenone	Ave	2.208	2.355	0.0100	10.7	10.0	6.7	20.0
Hexachloroethane	Ave	0.7046	0.7764	0.3000	11.0	10.0	10.2	20.0
Nitrobenzene	Ave	0.5286	0.5743	0.2000	10.9	10.0	8.7	20.0
Isophorone	Ave	0.8671	0.9145	0.4000	10.5	10.0	5.5	20.0
2-Nitrophenol	Ave	0.1796	0.1844	0.1000	10.3	10.0	2.6	20.0
2,4-Dimethylphenol	Ave	0.4258	0.4425	0.2000	10.4	10.0	3.9	20.0
Benzoic acid	Lin1		0.1800		17.4	20.0	-12.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.4621	0.4860	0.3000	10.5	10.0	5.2	20.0
2,4-Dichlorophenol	Ave	0.2544	0.2586	0.2000	10.2	10.0	1.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2943	0.2950		10.0	10.0	0.3	20.0
Naphthalene	Ave	1.033	1.003	0.7000	9.71	10.0	-2.9	20.0
4-Chloroaniline	Ave	0.4454	0.4236	0.0100	9.51	10.0	-4.9	20.0
2,6-Dichlorophenol	Ave	0.2529	0.2610		10.3	10.0	3.2	20.0
Hexachlorobutadiene	Ave	0.1749	0.1760	0.0100	10.1	10.0	0.7	20.0
Caprolactam	Ave	0.1055	0.1152	0.0100	21.8	20.0	9.1	20.0
4-Chloro-3-methylphenol	Ave	0.3457	0.3754	0.2000	10.9	10.0	8.6	20.0
2-Methylnaphthalene	Ave	0.6462	0.6347	0.4000	9.82	10.0	-1.8	20.0
1-Methylnaphthalene	Ave	0.6098	0.5810		9.53	10.0	-4.7	20.0
Hexachlorocyclopentadiene	Ave	0.3301	0.3390	0.0500	10.3	10.0	2.7	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4757	0.4753	0.0100	9.99	10.0	-0.0	20.0
2,4,6-Trichlorophenol	Ave	0.3285	0.3352	0.2000	10.2	10.0	2.0	20.0
2,4,5-Trichlorophenol	Ave	0.3252	0.3308	0.2000	10.2	10.0	1.7	20.0

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242932 Batch Start Date: 08/17/16 07:44 Batch Analyst: Ross, Justin

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	FirstAdjustpH	exBENZALDEHYD 00042	exBNASPIKE 00067
240-68359-F-5	MSA-SW38A-081516	3510C, 8270D	T	7	1050 mL	2 mL	2		
240-68359-F-13	MSA-SW40A-081516	3510C, 8270D	T	7	1020 mL	2 mL	2		
240-68359-F-17	MSA-SW41A-081516	3510C, 8270D	T	7	1050 mL	2 mL	2		
240-68359-E-21	MSA-SW42A-081516	3510C, 8270D	T	7	1030 mL	2 mL	2		
240-68359-D-42	MSA-SW46A-081516	3510C, 8270D	T	7	1050 mL	2 mL	2		
240-68359-E-43	MSA-SW47A-081516	3510C, 8270D	T	7	1050 mL	2 mL	2		
240-68359-E-44	MSA-SW48A-081516	3510C, 8270D	T	7	870 mL	2 mL	2		
240-68359-E-45	MSA-SW49A-081516	3510C, 8270D	T	7	1030 mL	2 mL	2		
MB 240-242932/13		3510C, 8270D		7	1000 mL	2 mL	2		
LCS 240-242932/14		3510C, 8270D		7	1000 mL	2 mL	2	1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	exBNASURR W 00037					
240-68359-F-5	MSA-SW38A-081516	3510C, 8270D	T	1 mL					
240-68359-F-13	MSA-SW40A-081516	3510C, 8270D	T	1 mL					
240-68359-F-17	MSA-SW41A-081516	3510C, 8270D	T	1 mL					
240-68359-E-21	MSA-SW42A-081516	3510C, 8270D	T	1 mL					
240-68359-D-42	MSA-SW46A-081516	3510C, 8270D	T	1 mL					
240-68359-E-43	MSA-SW47A-081516	3510C, 8270D	T	1 mL					
240-68359-E-44	MSA-SW48A-081516	3510C, 8270D	T	1 mL					
240-68359-E-45	MSA-SW49A-081516	3510C, 8270D	T	1 mL					
MB 240-242932/13		3510C, 8270D		1 mL					
LCS 240-242932/14		3510C, 8270D		1 mL					

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 SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242932 Batch Start Date: 08/17/16 07:44 Batch Analyst: Ross, Justin

Batch Method: 3510C Batch End Date:

Batch Notes	
Acid Used for pH Adjustment ID	2526277
Base Used to Adjust pH ID	2479223
Na2SO4 ID	2548157
NaCl ID	2651530
pH Paper ID	2644946 2459008
Prep Solvent ID	2644182

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.

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG No.:

Project: MSA Surface Water

Client Sample ID	Lab Sample ID
MSA-SW37A-081516	240-68359-1
MSA-SW37B-081516	240-68359-2
MSA-SW37C-081516	240-68359-3
MSA-SW37D-081516	240-68359-4
MSA-SW38A-081516	240-68359-5
MSA-SW38B-081516	240-68359-6
MSA-SW38C-081516	240-68359-7
MSA-SW38D-081516	240-68359-8
MSA-SW39A-081516	240-68359-9
MSA-SW39B-081516	240-68359-10
MSA-SW39C-081516	240-68359-11
MSA-SW39D-081516	240-68359-12
MSA-SW40A-081516	240-68359-13
MSA-SW40B-081516	240-68359-14
MSA-SW40C-081516	240-68359-15
MSA-SW40D-081516	240-68359-16
MSA-SW41A-081516	240-68359-17
MSA-SW41B-081516	240-68359-18
MSA-SW41C-081516	240-68359-19
MSA-SW41D-081516	240-68359-20
MSA-SW42A-081516	240-68359-21
MSA-SW42B-081516	240-68359-22
MSA-SW42C-081516	240-68359-23
MSA-SW42D-081516	240-68359-24
MSA-SW43A-081516	240-68359-25
MSA-SW43B-081516	240-68359-26
MSA-SW43C-081516	240-68359-27
MSA-SW43D-081516	240-68359-28
MSA-SW44A-081516	240-68359-29
MSA-SW44B-081516	240-68359-30
MSA-SW44C-081516	240-68359-31
MSA-SW44D-081516	240-68359-32
MSA-SW45A-081516	240-68359-33
MSA-SW45B-081516	240-68359-34
MSA-SW45C-081516	240-68359-35
MSA-SW45D-081516	240-68359-36

Comments:

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 MDL Date: 07/27/2016 12:39

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.27
Arsenic	75.00	5	0.35
Barium	137.00	5	0.52
Beryllium	9.00	1	0.4
Cadmium	111.00	1	0.31
Chromium	52.00	2	0.26
Cobalt	59.00	1	0.13
Copper	65.00	2	0.36
Lead	208.00	1	0.16
Molybdenum	95.00	10	0.51
Nickel	60.00	2	0.28
Selenium	78.00	5	0.48
Silver	107.00	1	0.03
Thallium	205.00	1	0.28
Tungsten	182.00	10	0.89
Vanadium	51.00	5	0.54
Zinc	66.00	20	6.22

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:03

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.49
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	1	0.061
Chromium	52.00	2	0.6
Cobalt	59.00	1	0.021
Copper	65.00	2	0.75
Lead	208.00	1	0.11
Molybdenum	95.00	10	0.23
Nickel	60.00	2	0.23
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Thallium	205.00	1	0.074
Tungsten	182.00	10	0.5
Vanadium	51.00	5	0.23
Zinc	66.00	20	7.3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 12/03/2014 00:00

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.09

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 09/17/2014 14:07

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2340B RL Date: 04/14/2011 14:06

Analyte	Wavelength/ Mass	RL (mg/L)	
Calcium hardness as calcium carbonate		12	
Hardness as calcium carbonate		33	
Magnesium hardness as calcium carbonate		21	

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-68359-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2340B XMDL Date: 04/14/2011 14:07

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Calcium hardness as calcium carbonate		12000	325
Hardness as calcium carbonate		33000	465
Magnesium hardness as calcium carbonate		21000	140

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-68359-1

SDG No.:

Instrument ID: I10 Date: 04/12/2016 14:53

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		200	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		2000	6020
Cadmium		4000	6020
Chromium		10000	6020
Cobalt		5000	6020
Copper		10000	6020
Lead		4000	6020
Molybdenum		2000	6020
Nickel		10000	6020
Selenium		10000	6020
Silver		300	6020
Thallium		2000	6020
Vanadium		10000	6020
Zinc		10000	6020
Tungsten		2500	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-68359-1

SDG No.:

Instrument ID: H1 Date: 12/10/2013 15:54

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7470A

FORM XI - IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/18/2016 15:26 End Date: 08/18/2016 23:25

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
ZZZZZZ			15:26																				
ICIS 240-243331/2	1		15:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD1 240-243331/3 IC	1		15:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD2 240-243331/4 IC	1		15:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD3 240-243331/5 IC	1		15:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD4 240-243331/6 IC	1		15:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICV 240-243331/7	1		15:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICB 240-243331/8	1		15:55	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CRI 240-243331/9	1		15:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA 240-243331/10	1		16:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-243331/11	1		16:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-243331/12			16:11																				
CCB 240-243331/13			16:15																				
CCV 240-243331/14			16:22																				
CCB 240-243331/15			16:27																				
ZZZZZZ			16:31																				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
ZZZZZZ			16:51																				
ZZZZZZ			16:55																				
ZZZZZZ			16:59																				
ZZZZZZ			17:03																				
ZZZZZZ			17:07																				
CCV 240-243331/26			17:11																				
CCB 240-243331/27			17:15																				
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				
ZZZZZZ			17:27																				
ZZZZZZ			17:32																				
ZZZZZZ			17:36																				
ZZZZZZ			17:40																				
ZZZZZZ			17:44																				
ZZZZZZ			17:48																				
CCV 240-243331/36			17:52																				
CCB 240-243331/37			17:56																				
CRI 240-243331/38			18:00																				
ZZZZZZ			18:04																				
ZZZZZZ			18:08																				
ZZZZZZ			18:12																				
ZZZZZZ			18:16																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/18/2016 15:26 End Date: 08/18/2016 23:25

Lab Sample ID	D/F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
ZZZZZZ			18:20																				
ZZZZZZ			18:24																				
ZZZZZZ			18:28																				
ZZZZZZ			18:32																				
ZZZZZZ			18:36																				
CCV 240-243331/48			18:40																				
CCB 240-243331/49			18:44																				
ZZZZZZ			18:48																				
ZZZZZZ			18:52																				
ZZZZZZ			18:56																				
ZZZZZZ			19:00																				
ZZZZZZ			19:04																				
ZZZZZZ			19:08																				
ZZZZZZ			19:12																				
ZZZZZZ			19:16																				
ZZZZZZ			19:20																				
ZZZZZZ			19:24																				
CCV 240-243331/60	1		19:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243331/61	1		19:32	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
MB 240-242964/1-A	1	R	19:37	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
LCS 240-242964/2-A	1	R	19:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-68359-1	5	D	19:45	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-1 SD	25	D	19:49	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			19:53																				
240-68359-1 MS	5	D	19:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-68359-1 MSD	5	D	20:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-68359-2	5	D	20:05	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-3	5	D	20:09	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-4	5	D	20:13	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-243331/72	1		20:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243331/73	1		20:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-5	5	D	20:25	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-6	5	D	20:29	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-7	5	D	20:34	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-8	5	D	20:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-9	5	D	20:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-10	5	D	20:46	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-11	5	D	20:50	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-12	5	D	20:54	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-13	5	D	20:58	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-14	5	D	21:02	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-243331/84	1		21:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/18/2016 15:26 End Date: 08/18/2016 23:25

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
CCB 240-243331/85	1		21:10	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-15	5	D	21:15	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-16	5	D	21:19	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-17	5	D	21:23	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-18	5	D	21:27	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-19	5	D	21:31	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-20	5	D	21:35	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-243331/92	1		21:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243331/93	1		21:43	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			21:47																				
ZZZZZZ			21:51																				
ZZZZZZ			21:55																				
ZZZZZZ			21:59																				
ZZZZZZ			22:04																				
ZZZZZZ			22:07																				
ZZZZZZ			22:11																				
CCV 240-243331/101			22:15																				
CCB 240-243331/102			22:19																				
ZZZZZZ			22:23																				
ZZZZZZ			22:28																				
ZZZZZZ			22:32																				
ZZZZZZ			22:36																				
ZZZZZZ			22:40																				
ZZZZZZ			22:44																				
CCV 240-243331/109			22:48																				
CCB 240-243331/110			22:52																				
ZZZZZZ			22:56																				
ZZZZZZ			23:00																				
ZZZZZZ			23:04																				
ZZZZZZ			23:08																				
ZZZZZZ			23:13																				
ZZZZZZ			23:17																				
CCV 240-243331/117			23:21																				
CCB 240-243331/118			23:25																				

Prep Types
D = Dissolved
R = Total Recoverable

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/18/2016 End Date: 08/18/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q
ICIS 240-243331/2	15:31	100		100		100		100		100	
STD1 240-243331/3 I	15:35	110		102		102		112		102	
STD2 240-243331/4 I	15:39	106		101		101		111		98	
STD3 240-243331/5 I	15:43	103		100		100		108		95	
STD4 240-243331/6 I	15:47	103		99		99		108		101	
ICV 240-243331/7	15:51	104		99		99		110		96	
ICB 240-243331/8	15:55	109		98		98		110		100	
CRI 240-243331/9	15:59	108		100		100		109		99	
ICSA 240-243331/10	16:03	97		95		95		103		90	
ICSAB 240-243331/11	16:07	94		95		95		103		92	
CCV 240-243331/60	19:28	99		95		95		111		98	
CCB 240-243331/61	19:32	100		92		92		110		98	
MB 240-242964/1-A	19:37	96		87		87		105		92	
LCS 240-242964/2-A	19:41	94		87		87		106		90	
240-68359-1	19:45	103		98		98		118		95	
240-68359-1 SD	19:49	109		105		105				104	
240-68359-1 PDS	19:53	93		92		92		106		89	
240-68359-1 MS	19:57	98		95		95		110		91	
240-68359-1 MSD	20:01	98		96		96		110		91	
240-68359-2	20:05	104		98		98		117		94	
240-68359-3	20:09	108		102		102		118		95	
240-68359-4	20:13	80		103		103		98		94	
CCV 240-243331/72	20:17	100		98		98		110		95	
CCB 240-243331/73	20:21	106		97		97		113		102	
240-68359-5	20:25	107		102		102				97	
240-68359-6	20:29	109		107		107				101	
240-68359-7	20:34	112		110		110				100	
240-68359-8	20:38	114		110		110				102	
240-68359-9	20:42	113		111		111				101	
240-68359-10	20:46	113		110		110				101	
240-68359-11	20:50	110		107		107		120		96	
240-68359-12	20:54	110		106		106				97	
240-68359-13	20:58	111		108		108				99	
240-68359-14	21:02	116		114		114				104	
CCV 240-243331/84	21:06	107		108		108		117		102	
CCB 240-243331/85	21:10	108		99		99		114		102	
240-68359-15	21:15	109		102		102		120		96	
240-68359-16	21:19	112		108		108				100	
240-68359-17	21:23	116		114		114				104	
240-68359-18	21:27			118		118				107	
240-68359-19	21:31	117		116		116				104	
240-68359-20	21:35	117		111		111				102	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/18/2016 End Date: 08/18/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q
CCV 240-243331/92	21:39	106		106		106		114		104	
CCB 240-243331/93	21:43	107		99		99		112		102	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/18/2016 End Date: 08/18/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In	Q	Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q
ICIS 240-243331/2	15:31	100		100		100		100			
STD1 240-243331/3 I	15:35	100		101		101		105			
STD2 240-243331/4 I	15:39	97		101		100		100			
STD3 240-243331/5 I	15:43	95		101		101		100			
STD4 240-243331/6 I	15:47	98		100		100		100			
ICV 240-243331/7	15:51	96		97		98		97			
ICB 240-243331/8	15:55	98		99		99		100			
CRI 240-243331/9	15:59	98		99		99		101			
ICSA 240-243331/10	16:03	92		96		96		97			
ICSAB 240-243331/11	16:07	92		95		96		97			
CCV 240-243331/60	19:28	92		97		97		93			
CCB 240-243331/61	19:32	93		94		95		96			
MB 240-242964/1-A	19:37	87		91		91		97			
LCS 240-242964/2-A	19:41	84		90		92		93			
240-68359-1	19:45	93		95		95		92			
240-68359-1 SD	19:49	99		100		100		100			
240-68359-1 PDS	19:53	86		92		92		89			
240-68359-1 MS	19:57	89		94		91		91			
240-68359-1 MSD	20:01	89		92		92		89			
240-68359-2	20:05	93		95		94		91			
240-68359-3	20:09	97		94		94		91			
240-68359-4	20:13	97		94		97		92			
CCV 240-243331/72	20:17	93		94		94		93			
CCB 240-243331/73	20:21	98		99		98		99			
240-68359-5	20:25	97		99		100		96			
240-68359-6	20:29	101		100		101		95			
240-68359-7	20:34	101		101		100		96			
240-68359-8	20:38	102		101		100		95			
240-68359-9	20:42	102		100		99		96			
240-68359-10	20:46	102		102		101		96			
240-68359-11	20:50	99		98		96		92			
240-68359-12	20:54	98		97		98		92			
240-68359-13	20:58	100		98		97		92			
240-68359-14	21:02	107		104		103		100			
CCV 240-243331/84	21:06	102		103		101		100			
CCB 240-243331/85	21:10	101		100		100		101			
240-68359-15	21:15	98		98		98		94			
240-68359-16	21:19	101		100		99		96			
240-68359-17	21:23	106		103		105		99			
240-68359-18	21:27	108		106		105		99			
240-68359-19	21:31	107		105		105		99			
240-68359-20	21:35	102		102		102		96			

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/18/2016 End Date: 08/18/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In	Q	Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q
CCV 240-243331/92	21:39	100		101		101		99			
CCB 240-243331/93	21:43	98		99		98		98			

FORM XV - IN

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	ICV 240-243331/7 08/18/2016 15:51				CCV 240-243331/60 08/18/2016 19:28				CCV 240-243331/72 08/18/2016 20:17			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	39.5		40.0	99	49.2		50.0	98	49.6		50.0	99
Arsenic	40.1		40.0	100	49.9		50.0	100	49.7		50.0	99
Barium	39.4		40.0	98	48.3		50.0	97	48.7		50.0	97
Beryllium	40.0		40.0	100	48.0		50.0	96	48.2		50.0	96
Cadmium	40.3		40.0	101	49.6		50.0	99	49.4		50.0	99
Calcium	20400		20000	102	24300		25000	97	24000		25000	96
Chromium	40.3		40.0	101	51.8		50.0	104	49.4		50.0	99
Cobalt	40.5		40.0	101	52.3		50.0	105	50.1		50.0	100
Copper	41.3		40.0	103	53.3		50.0	107	51.0		50.0	102
Lead	41.5		40.0	104	49.5		50.0	99	50.7		50.0	101
Magnesium	20400		20000	102	24900		25000	100	24100		25000	96
Molybdenum	41.1		40.0	103	50.2		50.0	100	51.1		50.0	102
Nickel	41.5		40.0	104	53.6		50.0	107	50.2		50.0	100
Selenium	40.1		40.0	100	47.7		50.0	95	48.0		50.0	96
Silver	40.1		40.0	100	48.3		50.0	97	49.0		50.0	98
Thallium	38.8		40.0	97	46.8		50.0	94	47.6		50.0	95
Tungsten	39.9		40.0	100	50.2		50.0	100	50.3		50.0	101
Vanadium	41.7		40.0	104	51.6		50.0	103	49.4		50.0	99
Zinc	43.3		40.0	108	51.0		50.0	102	49.5		50.0	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	CCV 240-243331/84 08/18/2016 21:06				CCV 240-243331/92 08/18/2016 21:39							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	49.6		50.0	99	49.5		50.0	99				
Arsenic	51.2		50.0	102	50.7		50.0	101				
Barium	48.5		50.0	97	48.2		50.0	96				
Beryllium	49.1		50.0	98	47.9		50.0	96				
Cadmium	49.6		50.0	99	48.8		50.0	98				
Calcium	24300		25000	97	24200		25000	97				
Chromium	50.0		50.0	100	49.2		50.0	98				
Cobalt	50.2		50.0	100	49.5		50.0	99				
Copper	50.5		50.0	101	50.4		50.0	101				
Lead	50.0		50.0	100	48.7		50.0	97				
Magnesium	24600		25000	98	24400		25000	97				
Molybdenum	51.4		50.0	103	49.9		50.0	100				
Nickel	50.9		50.0	102	50.2		50.0	100				
Selenium	49.5		50.0	99	49.1		50.0	98				
Silver	49.5		50.0	99	47.3		50.0	95				
Thallium	47.0		50.0	94	45.6		50.0	91				
Tungsten	48.4		50.0	97	47.7		50.0	95				
Vanadium	50.3		50.0	101	49.8		50.0	100				
Zinc	50.0		50.0	100	49.5		50.0	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-243331/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.05		102	50-150
Arsenic	5.00	4.89	J	98	50-150
Barium	5.00	4.72	J	94	50-150
Beryllium	1.00	0.900	J	90	50-150
Cadmium	1.00	1.04		104	50-150
Chromium	2.00	2.35		117	50-150
Cobalt	1.00	1.06		106	50-150
Copper	2.00	2.26		113	50-150
Lead	1.00	1.06		106	50-150
Molybdenum	5.00	5.32	J	106	50-150
Nickel	2.00	2.24		112	50-150
Selenium	5.00	5.11		102	50-150
Silver	1.00	0.982	J	98	50-150
Thallium	1.00	0.998	J	100	50-150
Vanadium	5.00	5.14		103	50-150
Zinc	20.0	21.0		105	50-150
Calcium	1000	1010		101	50-150
Magnesium	1000	1000		100	50-150
Tungsten	10.0	9.74	J	97	50-150

Lab Sample ID: CRI 240-243587/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	1.92	J	96	50-150
Arsenic	5.00	4.94	J	99	50-150
Barium	5.00	4.72	J	94	50-150
Beryllium	1.00	0.952	J	95	50-150
Cadmium	1.00	0.988	J	99	50-150
Chromium	2.00	2.27		114	50-150
Cobalt	1.00	1.03		103	50-150
Copper	2.00	2.14		107	50-150
Lead	1.00	1.02		102	50-150
Molybdenum	5.00	5.01	J	100	50-150
Nickel	2.00	2.26		113	50-150

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-243587/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	5.20		104	50-150
Silver	1.00	0.987	J	99	50-150
Thallium	1.00	0.979	J	98	50-150
Vanadium	5.00	4.89	J	98	50-150
Zinc	20.0	21.0		105	50-150
Calcium	1000	1010		101	50-150
Magnesium	1000	976	J	98	50-150
Tungsten	10.0	9.55	J	96	50-150

Lab Sample ID: CRI 240-243656/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.01		100	50-150
Arsenic	5.00	4.94	J	99	50-150
Barium	5.00	4.90	J	98	50-150
Beryllium	1.00	1.02		102	50-150
Cadmium	1.00	0.982	J	98	50-150
Chromium	2.00	2.22		111	50-150
Cobalt	1.00	1.05		105	50-150
Copper	2.00	2.18		109	50-150
Lead	1.00	1.01		101	50-150
Molybdenum	5.00	5.29	J	106	50-150
Nickel	2.00	2.21		111	50-150
Selenium	5.00	4.67	J	93	50-150
Silver	1.00	1.01		101	50-150
Thallium	1.00	1.03		103	50-150
Vanadium	5.00	5.03		101	50-150
Zinc	20.0	21.0		105	50-150
Calcium	1000	1030		103	50-150
Magnesium	1000	996	J	100	50-150
Tungsten	10.0	9.43	J	94	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-243331/8 08/18/2016 15:55		CCB 240-243331/61 08/18/2016 19:32		CCB 240-243331/73 08/18/2016 20:21		CCB 240-243331/85 08/18/2016 21:10	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.320	J	0.221	J	0.229	J	0.210	J
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	0.0550	J	0.154	J	0.0840	J
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	0.466	J	0.475	J	0.472	J	0.474	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Tungsten	10	0.913	J	0.883	J	0.895	J	0.794	J
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-243331/93 08/18/2016 21:43							
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.220	J						
Arsenic	5.0	5.0	U						
Barium	5.0	5.0	U						
Beryllium	1.0	1.0	U						
Cadmium	1.0	1.0	U						
Calcium	1000	1000	U						
Chromium	2.0	2.0	U						
Cobalt	1.0	1.0	U						
Copper	2.0	2.0	U						
Lead	1.0	1.0	U						
Magnesium	1000	1000	U						
Molybdenum	10	0.474	J						
Nickel	2.0	2.0	U						
Selenium	5.0	5.0	U						
Silver	1.0	1.0	U						
Thallium	1.0	1.0	U						
Tungsten	10	0.860	J						
Vanadium	5.0	5.0	U						
Zinc	20	20	U						

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSA 240-243331/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00072

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0990**	
Arsenic		**0.0480**	
Barium		**0.0340**	
Beryllium		**0.0230**	
Cadmium		**0.0460**	
Calcium	**50000**	**49428**	**99**
Chromium		**0.696**	
Cobalt		**0.0060**	
Copper		**0.321**	
Lead		**0.115**	
Magnesium	**50000**	**49007**	**98**
Molybdenum	**1000**	**1039**	**104**
Nickel		**0.0940**	
Selenium		**-0.0290**	
Silver		**0.0080**	
Thallium		**0.0150**	
Tungsten		**0.348**	
Vanadium		**-0.0150**	
Zinc		**1.15**	
Aluminum	*50000*	*51508*	*103*
Boron		*-0.0410*	
Iron	*50000*	*49581*	*99*
Lithium		*0.0740*	
Manganese		*0.345*	
Potassium	*50000*	*48623*	*97*
Sodium	*50000*	*49025*	*98*
Strontium		*0.380*	
Tin		*0.994*	
Titanium	*1000*	*993*	*99*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSAB 240-243331/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00069

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**99.9**	**100**
Arsenic	**100**	**99.3**	**99**
Barium	**100**	**98.3**	**98**
Beryllium	**100**	**103**	**103**
Cadmium	**100**	**99.3**	**99**
Calcium	**50000**	**49305**	**99**
Chromium	**100**	**99.5**	**100**
Cobalt	**100**	**100**	**100**
Copper	**100**	**100**	**100**
Lead	**100**	**102**	**102**
Magnesium	**50000**	**49127**	**98**
Molybdenum	**1100**	**1169**	**106**
Nickel	**100**	**102**	**102**
Selenium	**100**	**97.0**	**97**
Silver	**100**	**98.1**	**98**
Thallium	**100**	**99.4**	**99**
Tungsten	**100**	**105**	**105**
Vanadium	**100**	**99.8**	**100**
Zinc	**100**	**99.5**	**100**
Aluminum	*50000*	*51015*	*102*
Boron	*100*	*98.5*	*99*
Iron	*50000*	*49530*	*99*
Lithium	*100*	*98.3*	*98*
Manganese	*100*	*99.9*	*100*
Potassium	*50000*	*48517*	*97*
Sodium	*50000*	*48752*	*98*
Strontium	*100*	*96.0*	*96*
Tin	*100*	*98.1*	*98*
Titanium	*1100*	*1093*	*99*

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

FORM IVA-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/19/2016 18:14 End Date: 08/20/2016 05:10

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
ZZZZZZ			18:14																				
ICIS 240-243587/2	1		18:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD1 240-243587/3 IC			18:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD2 240-243587/4 IC			18:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD3 240-243587/5 IC			18:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD4 240-243587/6 IC	1		18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICV 240-243587/7	1		18:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICB 240-243587/8	1		18:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CRI 240-243587/9	1		18:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA 240-243587/10	1		18:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-243587/11	1		18:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-243587/12	1		18:59	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB 240-243587/13	1		19:03	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			19:07																				
ZZZZZZ			19:11																				
ZZZZZZ			19:15																				
240-68359-18	5	D	19:19				X																
ZZZZZZ			19:23																				
ZZZZZZ			19:27																				
ZZZZZZ			19:31																				
ZZZZZZ			19:35																				
ZZZZZZ			19:39																				
ZZZZZZ			19:43																				
CCV 240-243587/24	1		19:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243587/25	1		19:51	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			19:55																				
ZZZZZZ			19:59																				
ZZZZZZ			20:03																				
ZZZZZZ			20:07																				
ZZZZZZ			20:11																				
ZZZZZZ			20:15																				
ZZZZZZ			20:19																				
ZZZZZZ			20:23																				
ZZZZZZ			20:28																				
ZZZZZZ			20:32																				
CCV 240-243587/36			20:36																				
CCB 240-243587/37			20:40																				
ZZZZZZ			20:44																				
ZZZZZZ			20:48																				
ZZZZZZ			20:52																				
ZZZZZZ			20:56																				
ZZZZZZ			21:00																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/19/2016 18:14 End Date: 08/20/2016 05:10

Lab Sample ID	D/F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
ZZZZZZ			21:04																				
ZZZZZZ			21:08																				
ZZZZZZ			21:11																				
ZZZZZZ			21:15																				
ZZZZZZ			21:20																				
CCV 240-243587/48			21:24																				
CCB 240-243587/49			21:28																				
ZZZZZZ			21:32																				
ZZZZZZ			21:36																				
ZZZZZZ			21:40																				
ZZZZZZ			21:44																				
ZZZZZZ			21:48																				
ZZZZZZ			21:52																				
ZZZZZZ			21:56																				
ZZZZZZ			22:00																				
ZZZZZZ			22:04																				
ZZZZZZ			22:08																				
CCV 240-243587/60			22:12																				
CCB 240-243587/61			22:17																				
ZZZZZZ			22:21																				
ZZZZZZ			22:25																				
ZZZZZZ			22:29																				
ZZZZZZ			22:33																				
ZZZZZZ			22:37																				
ZZZZZZ			22:41																				
ZZZZZZ			22:45																				
ZZZZZZ			22:49																				
ZZZZZZ			22:53																				
ZZZZZZ			22:57																				
CCV 240-243587/72			23:01																				
CCB 240-243587/73			23:05																				
ZZZZZZ			23:09																				
ZZZZZZ			23:13																				
ZZZZZZ			23:17																				
ZZZZZZ			23:21																				
ZZZZZZ			23:25																				
ZZZZZZ			23:29																				
ZZZZZZ			23:33																				
ZZZZZZ			23:37																				
ZZZZZZ			23:41																				
ZZZZZZ			23:45																				
CCV 240-243587/84			23:49																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/19/2016 18:14 End Date: 08/20/2016 05:10

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
CCB 240-243587/85			23:53																				
ZZZZZZ			23:58																				
ZZZZZZ			00:02																				
ZZZZZZ			00:06																				
ZZZZZZ			00:10																				
ZZZZZZ			00:14																				
ZZZZZZ			00:18																				
ZZZZZZ			00:22																				
ZZZZZZ			00:25																				
ZZZZZZ			00:29																				
ZZZZZZ			00:33																				
CCV 240-243587/96			00:38																				
CCB 240-243587/97			00:42																				
ZZZZZZ			00:46																				
ZZZZZZ			00:50																				
ZZZZZZ			00:54																				
ZZZZZZ			00:58																				
ZZZZZZ			01:02																				
ZZZZZZ			01:06																				
ZZZZZZ			01:10																				
ZZZZZZ			01:14																				
ZZZZZZ			01:18																				
ZZZZZZ			01:22																				
CCV 240-243587/108	1		01:26	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-243587/109	1		01:30	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X
ZZZZZZ			01:34																				
ZZZZZZ			01:38																				
ZZZZZZ			01:42																				
ZZZZZZ			01:46																				
ZZZZZZ			01:50																				
ZZZZZZ			01:54																				
MB 240-242972/1-A	1	R	01:58	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X
LCS 240-242972/2-A	1	R	02:03	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-243587/118	1		02:07	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-243587/119	1		02:11	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X
240-68359-21	5	D	02:15	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X
240-68359-21 SD	25	D	02:19	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X
ZZZZZZ			02:23																				
240-68359-21 MS	5	D	02:27	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-68359-21 MSD	5	D	02:31	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-68359-22	5	D	02:35	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X
240-68359-23	5	D	02:39	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/19/2016 18:14 End Date: 08/20/2016 05:10

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
240-68359-24	5	D	02:43	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-25	5	D	02:47	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-26	5	D	02:51	X	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-243587/130	1		02:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243587/131	1		02:59	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-27	5	D	03:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ICSA 240-243587/133	1		03:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-243587/134	1		03:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-243587/135	1		03:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243587/136	1		03:20	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-28	5	D	03:24	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-29	5	D	03:28	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-30	5	D	03:32	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-31	5	D	03:36	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-32	5	D	03:40	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-33	5	D	03:44	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-34	5	D	03:49	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-35	5	D	03:53	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-68359-36	5	D	03:57	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			04:01																				
CCV 240-243587/147	1		04:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-243587/148	1		04:09	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			04:13																				
ZZZZZZ			04:17																				
ZZZZZZ			04:21																				
ZZZZZZ			04:25																				
ZZZZZZ			04:29																				
CCV 240-243587/154			04:33																				
CCB 240-243587/155			04:37																				
ZZZZZZ			04:41																				
ZZZZZZ			04:45																				
ZZZZZZ			04:50																				
ZZZZZZ			04:54																				
ZZZZZZ			04:58																				
ZZZZZZ			05:02																				
CCV 240-243587/162			05:06																				
CCB 240-243587/163			05:10																				

Prep Types

D = Dissolved

R = Total Recoverable

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/19/2016 End Date: 08/20/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
ICIS 240-243587/2	18:18	100		100		100		100		100	
STD4 240-243587/6 I	18:34	94		101		96		99		98	
ICV 240-243587/7	18:38	99		102		102		97		97	
ICB 240-243587/8	18:42	103		102		106		104		102	
CRI 240-243587/9	18:47	101		104		101		104		103	
ICSA 240-243587/10	18:51	94		99		95		93		95	
ICSAB 240-243587/11	18:55	88		99		93		94		95	
CCV 240-243587/12	18:59	94		100		99		99		98	
CCB 240-243587/13	19:03	97		97		99		102		101	
240-68359-18	19:19	97		108		107		100		100	
CCV 240-243587/24	19:47	87		99		97		98		95	
CCB 240-243587/25	19:51	89		97		98		101		97	
CCV 240-243587/108	01:26	75		92		94		94		93	
CCB 240-243587/109	01:30	80		93		97		100		95	
MB 240-242972/1-A	01:58	64		86		87		92		89	
LCS 240-242972/2-A	02:03	59		84		84		89		84	
CCV 240-243587/118	02:07	76		90		92		92		89	
CCB 240-243587/119	02:11	80		87		92		95		92	
240-68359-21	02:15	78		88		89		88		88	
240-68359-21 SD	02:19	82		88		92		91		91	
240-68359-21 PDS	02:23	75		87		88		85		84	
240-68359-21 MS	02:27	78		86		89		85		87	
240-68359-21 MSD	02:31	77		87		89		85		87	
240-68359-22	02:35	82		88		89		85		86	
240-68359-23	02:39	82		84		90		83		85	
240-68359-24	02:43	83		88		91		86		88	
240-68359-25	02:47	83		89		91		87		88	
240-68359-26	02:51	84		90		94		86		89	
CCV 240-243587/130	02:55	85		89		90		89		89	
CCB 240-243587/131	02:59	86		87		91		93		92	
240-68359-27	03:04	82		88		92		86		88	
ICSA 240-243587/133	03:08	81		87		88		86		87	
ICSAB 240-243587/13	03:12	76		86		89		86		87	
CCV 240-243587/135	03:16	81		87		90		88		88	
CCB 240-243587/136	03:20	81		85		90		92		90	
240-68359-28	03:24	79		87		90		84		86	
240-68359-29	03:28	82		88		92		85		87	
240-68359-30	03:32	80		88		91		86		87	
240-68359-31	03:36	83		90		91		85		88	
240-68359-32	03:40	84		90		93		86		89	
240-68359-33	03:44	83		90		92		86		88	
240-68359-34	03:49	84		91		94		87		90	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/19/2016 End Date: 08/20/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
240-68359-35	03:53	83		91		94		86		89	
240-68359-36	03:57	85		92		93		86		89	
CCV 240-243587/147	04:05	83		88		90		88		88	
CCB 240-243587/148	04:09	90		86		91		94		90	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/19/2016 End Date: 08/20/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-243587/2	18:18	100		100		100					
STD4 240-243587/6 I	18:34	98		99		96					
ICV 240-243587/7	18:38	98		100		97					
ICB 240-243587/8	18:42	103		103		102					
CRI 240-243587/9	18:47	102		103		101					
ICSA 240-243587/10	18:51	99		100		98					
ICSAB 240-243587/11	18:55	99		101		98					
CCV 240-243587/12	18:59	100		102		100					
CCB 240-243587/13	19:03	102		104		102					
240-68359-18	19:19	101		101		96					
CCV 240-243587/24	19:47	98		101		98					
CCB 240-243587/25	19:51	99		100		100					
CCV 240-243587/108	01:26	97		99		95					
CCB 240-243587/109	01:30	98		100		100					
MB 240-242972/1-A	01:58	93		94		97					
LCS 240-242972/2-A	02:03	91		93		93					
CCV 240-243587/118	02:07	95		99		94					
CCB 240-243587/119	02:11	94		95		96					
240-68359-21	02:15	91		93		89					
240-68359-21 SD	02:19	93		96		93					
240-68359-21 PDS	02:23	92		94		89					
240-68359-21 MS	02:27	92		92		89					
240-68359-21 MSD	02:31	92		93		88					
240-68359-22	02:35	91		92		88					
240-68359-23	02:39	87		89		85					
240-68359-24	02:43	91		92		89					
240-68359-25	02:47	92		93		89					
240-68359-26	02:51	91		93		88					
CCV 240-243587/130	02:55	94		94		92					
CCB 240-243587/131	02:59	94		96		96					
240-68359-27	03:04	91		93		89					
ICSA 240-243587/133	03:08	91		93		92					
ICSAB 240-243587/13	03:12	92		95		91					
CCV 240-243587/135	03:16	92		93		92					
CCB 240-243587/136	03:20	92		94		95					
240-68359-28	03:24	91		93		88					
240-68359-29	03:28	91		93		87					
240-68359-30	03:32	90		92		87					
240-68359-31	03:36	90		92		88					
240-68359-32	03:40	90		93		87					
240-68359-33	03:44	90		93		88					
240-68359-34	03:49	92		93		88					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/19/2016 End Date: 08/20/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-68359-35	03:53	91		93		88					
240-68359-36	03:57	91		92		87					
CCV 240-243587/147	04:05	92		94		91					
CCB 240-243587/148	04:09	94		96		96					

2A-IN
CALIBRATION VERIFICATIONS
METALS

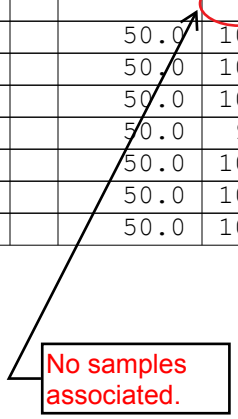
Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	ICV 240-243587/7 08/19/2016 18:38				CCV 240-243587/12 08/19/2016 18:59				CCV 240-243587/24 08/19/2016 19:47			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	39.8		40.0	99	51.1		50.0	102	50.3		50.0	101
Arsenic	40.7		40.0	102	50.0		50.0	100	50.4		50.0	101
Barium	39.8		40.0	99	50.0		50.0	100	49.5		50.0	99
Beryllium	39.7		40.0	99	50.1		50.0	100	47.2		50.0	94
Cadmium	40.5		40.0	101	50.6		50.0	101	50.5		50.0	101
Calcium	19900		20000	99	24600		25000	99	24200		25000	97
Chromium	39.3		40.0	98	49.8		50.0	100	50.3		50.0	101
Cobalt	39.5		40.0	99	50.4		50.0	101	50.8		50.0	102
Copper	40.5		40.0	101	51.3		50.0	103	51.6		50.0	103
Lead	40.0		40.0	100	50.4		50.0	101	50.1		50.0	100
Magnesium	19700		20000	98	24700		25000	99	24900		25000	99
Molybdenum	39.8		40.0	100					50.1		50.0	100
Nickel	40.2		40.0	101	51.4		50.0	103	51.4		50.0	103
Selenium	40.2		40.0	100	50.2		50.0	100	48.8		50.0	98
Silver	40.9		40.0	102	50.5		50.0	101	50.1		50.0	100
Thallium	38.8		40.0	97	48.7		50.0	97	48.7		50.0	97
Tungsten	39.0		40.0	98	51.2		50.0	102	51.3		50.0	103
Vanadium	40.6		40.0	102	49.8		50.0	100	50.3		50.0	101
Zinc	39.9		40.0	100	52.0		50.0	104	50.4		50.0	101



Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

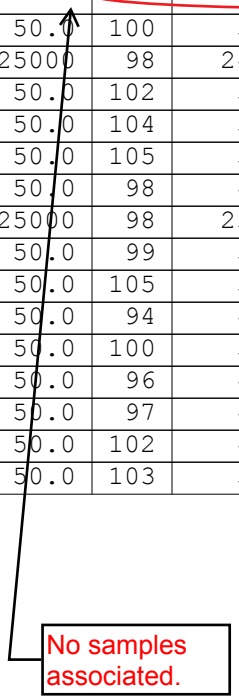
Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	CCV 240-243587/108 08/20/2016 01:26				CCV 240-243587/118 08/20/2016 02:07				CCV 240-243587/130 08/20/2016 02:55			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	49.6		50.0	99	50.8		50.0	102	50.5		50.0	101
Arsenic	49.4		50.0	99	50.3		50.0	101	49.2		50.0	98
Barium	50.0		50.0	100	50.5		50.0	101	50.4		50.0	101
Beryllium									46.5		50.0	93
Cadmium	50.0		50.0	100	51.2		50.0	102	49.7		50.0	99
Calcium	24500		25000	98	24100		25000	96	24400		25000	98
Chromium	50.9		50.0	102	50.4		50.0	101	49.2		50.0	98
Cobalt	51.8		50.0	104	51.2		50.0	102	50.2		50.0	100
Copper	52.5		50.0	105	52.1		50.0	104	50.5		50.0	101
Lead	49.2		50.0	98	49.0		50.0	98	49.7		50.0	99
Magnesium	24400		25000	98	23800		25000	95	23900		25000	96
Molybdenum	49.6		50.0	99	50.1		50.0	100	49.8		50.0	100
Nickel	52.4		50.0	105	51.7		50.0	103	50.1		50.0	100
Selenium	47.1		50.0	94	48.2		50.0	96	49.6		50.0	99
Silver	50.2		50.0	100	50.3		50.0	101	50.2		50.0	100
Thallium	47.8		50.0	96	47.3		50.0	95	48.1		50.0	96
Tungsten	48.6		50.0	97	49.9		50.0	100	48.1		50.0	96
Vanadium	50.8		50.0	102	49.9		50.0	100	49.4		50.0	99
Zinc	51.7		50.0	103	51.0		50.0	102	50.7		50.0	101



Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	CCV 240-243587/135 08/20/2016 03:16				CCV 240-243587/147 08/20/2016 04:05							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	50.8		50.0	102	50.0		50.0	100				
Arsenic	49.1		50.0	98	48.9		50.0	98				
Barium	50.3		50.0	101	50.1		50.0	100				
Beryllium	45.1		50.0	90	46.1		50.0	92				
Cadmium	49.9		50.0	100	49.9		50.0	100				
Calcium	24500		25000	98	24200		25000	97				
Chromium	49.7		50.0	99	49.4		50.0	99				
Cobalt	50.5		50.0	101	50.1		50.0	100				
Copper	51.3		50.0	103	50.5		50.0	101				
Lead	50.4		50.0	101	49.6		50.0	99				
Magnesium	24000		25000	96	23700		25000	95				
Molybdenum	63.0		50.0	126	49.9		50.0	100				
Nickel	50.4		50.0	101	50.6		50.0	101				
Selenium	48.6		50.0	97	47.9		50.0	96				
Silver	50.1		50.0	100	50.1		50.0	100				
Thallium	48.8		50.0	98	48.7		50.0	97				
Tungsten	51.5		50.0	103	49.0		50.0	98				
Vanadium	49.4		50.0	99	50.0		50.0	100				
Zinc	51.3		50.0	103	50.3		50.0	101				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-243587/8 08/19/2016 18:42		CCB 240-243587/13 08/19/2016 19:03		CCB 240-243587/25 08/19/2016 19:51		CCB 240-243587/109 08/20/2016 01:30	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.243	J	0.236	J	0.353	J	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	0.0920	J	0.0830	J
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	0.407	J	2.15	J	0.479	J	0.451	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	0.383	J	0.335	J	0.410	J	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	1.0	U	1.0	U	0.0850	J	1.0	U
Tungsten	10	0.816	J	0.965	J	0.910	J	0.903	J
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-243587/119 08/20/2016 02:11		CCB 240-243587/131 08/20/2016 02:59		CCB 240-243587/136 08/20/2016 03:20		CCB 240-243587/148 08/20/2016 04:09	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.261	J	2.0	U	0.225	J	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	0.196	J	0.139	J	0.0870	J	0.0660	J
Cadmium	1.0	0.0830	J	1.0	U	1.0	U	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	0.0600	J	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	0.550	J	0.510	J	2.38	J	0.490	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	0.581	J	0.389	J	0.328	J
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	0.103	J	1.0	U	0.0760	J	1.0	U
Tungsten	10	1.13	J	0.982	J	1.07	J	0.908	J
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSA 240-243587/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00072

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0340**	
Arsenic		**0.0520**	
Barium		**0.0340**	
Beryllium		**-0.0040**	
Cadmium		**0.0190**	
Calcium	**50000**	**49134**	**98**
Chromium		**0.636**	
Cobalt		**-0.0140**	
Copper		**0.272**	
Lead		**0.0900**	
Magnesium	**50000**	**48988**	**98**
Molybdenum	**1000**	**1045**	**105**
Nickel		**0.118**	
Selenium		**0.292**	
Silver		**-0.0090**	
Thallium		**-0.0120**	
Tungsten		**0.289**	
Vanadium		**-0.0340**	
Zinc		**1.06**	
Aluminum	*50000*	*51269*	*103*
Boron		*-2.68*	
Iron	*50000*	*48769*	*98*
Lithium		*-0.0800*	
Manganese		*0.193*	
Potassium	*50000*	*48001*	*96*
Sodium	*50000*	*48657*	*97*
Strontium		*0.298*	
Tin		*0.869*	
Titanium	*1000*	*1002*	*100*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSAB 240-243587/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00069

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**101**	**101**
Arsenic	**100**	**101**	**101**
Barium	**100**	**101**	**101**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**48847**	**98**
Chromium	**100**	**98.3**	**98**
Cobalt	**100**	**98.5**	**99**
Copper	**100**	**99.3**	**99**
Lead	**100**	**102**	**102**
Magnesium	**50000**	**48288**	**97**
Molybdenum	**1100**	**1131**	**103**
Nickel	**100**	**99.2**	**99**
Selenium	**100**	**97.9**	**98**
Silver	**100**	**102**	**102**
Thallium	**100**	**101**	**101**
Tungsten	**100**	**102**	**102**
Vanadium	**100**	**96.7**	**97**
Zinc	**100**	**101**	**101**
Aluminum	*50000*	*51427*	*103*
Boron	*100*	*101*	*101*
Iron	*50000*	*48882*	*98*
Lithium	*100*	*101*	*101*
Manganese	*100*	*94.2*	*94*
Potassium	*50000*	*48125*	*96*
Sodium	*50000*	*48676*	*97*
Strontium	*100*	*97.3*	*97*
Tin	*100*	*100*	*100*
Titanium	*1100*	*1095*	*100*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSA 240-243587/133 Instrument ID: I10

Lab File ID: 133ICSA.d ICS Source: MTMSICSAW_00072

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-0.0770**	
Arsenic		**0.0700**	
Barium		**0.0230**	
Beryllium		**0.0190**	
Cadmium		**0.0200**	
Calcium	**50000**	**49058**	**98**
Chromium		**0.648**	
Cobalt		**-0.0140**	
Copper		**0.282**	
Lead		**0.0920**	
Magnesium	**50000**	**47853**	**96**
Molybdenum	**1000**	**1029**	**103**
Nickel		**0.105**	
Selenium		**0.406**	
Silver		**-0.0140**	
Thallium		**-0.0070**	
Tungsten		**0.0720**	
Vanadium		**-0.103**	
Zinc		**1.01**	
Aluminum	*50000*	*50445*	*101*
Boron		*-2.30*	
Iron	*50000*	*49711*	*99*
Lithium		*-0.320*	
Manganese		*0.178*	
Potassium	*50000*	*48683*	*97*
Sodium	*50000*	*47253*	*95*
Strontium		*0.351*	
Tin		*0.741*	
Titanium	*1000*	*1006*	*101*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSAB 240-243587/134 Instrument ID: I10

Lab File ID: 134ICAB.d ICS Source: MTMSICSABW_00069

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**101**	**101**
Arsenic	**100**	**99.2**	**99**
Barium	**100**	**101**	**101**
Beryllium	**100**	**89.8**	**90**
Cadmium	**100**	**100**	**100**
Calcium	**50000**	**49531**	**99**
Chromium	**100**	**101**	**101**
Cobalt	**100**	**102**	**102**
Copper	**100**	**102**	**102**
Lead	**100**	**99.7**	**100**
Magnesium	**50000**	**48168**	**96**
Molybdenum	**1100**	**1144**	**104**
Nickel	**100**	**102**	**102**
Selenium	**100**	**95.7**	**96**
Silver	**100**	**100**	**100**
Thallium	**100**	**100.0**	**100**
Tungsten	**100**	**101**	**101**
Vanadium	**100**	**101**	**101**
Zinc	**100**	**103**	**103**
Aluminum	*50000*	*50522*	*101*
Boron	*100*	*88.0*	*88*
Iron	*50000*	*50434*	*101*
Lithium	*100*	*89.2*	*89*
Manganese	*100*	*97.2*	*97*
Potassium	*50000*	*48929*	*98*
Sodium	*50000*	*48186*	*96*
Strontium	*100*	*96.4*	*96*
Tin	*100*	*99.5*	*100*
Titanium	*1100*	*1115*	*101*

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

FORM IVA-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/22/2016 08:02 End Date: 08/22/2016 19:01

Lab Sample ID	D/F	Type	Time	Analytes																			
				Be																			
ZZZZZZ			08:02																				
ICIS 240-243656/2	1		08:06	X																			
STD1 240-243656/3 IC	1		08:10	X																			
STD2 240-243656/4 IC	1		08:14	X																			
STD3 240-243656/5 IC	1		08:18	X																			
STD4 240-243656/6 IC	1		08:22	X																			
ICV 240-243656/7	1		08:26	X																			
ICB 240-243656/8	1		08:30	X																			
CRI 240-243656/9	1		08:34	X																			
ICSA 240-243656/10	1		08:38	X																			
ICSAB 240-243656/11	1		08:42	X																			
CCV 240-243656/12			08:46																				
CCB 240-243656/13			08:50																				
ZZZZZZ			08:57																				
ZZZZZZ			09:01																				
ZZZZZZ			09:07																				
ZZZZZZ			09:11																				
ZZZZZZ			09:15																				
ZZZZZZ			09:19																				
CCV 240-243656/20			09:23																				
CCB 240-243656/21			09:27																				
ZZZZZZ			09:31																				
ZZZZZZ			09:35																				
ZZZZZZ			09:39																				
ZZZZZZ			09:43																				
ZZZZZZ			09:47																				
ZZZZZZ			09:51																				
ZZZZZZ			09:55																				
ZZZZZZ			09:59																				
ZZZZZZ			10:03																				
ZZZZZZ			10:07																				
CCV 240-243656/32			10:11																				
CCB 240-243656/33			10:15																				
ZZZZZZ			10:19																				
ZZZZZZ			10:23																				
ZZZZZZ			10:27																				
CCV 240-243656/37			10:32																				
CCB 240-243656/38			10:36																				
ZZZZZZ			10:40																				
ZZZZZZ			10:44																				
ZZZZZZ			10:48																				
ZZZZZZ			10:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/22/2016 08:02 End Date: 08/22/2016 19:01

Lab Sample ID	D / F	Type	Time	Analytes																			
				Be																			
ZZZZZZ			10:56																				
ZZZZZZ			11:00																				
ZZZZZZ			11:04																				
ZZZZZZ			11:08																				
ZZZZZZ			11:12																				
ZZZZZZ			11:16																				
CCV 240-243656/49			11:20																				
CCB 240-243656/50			11:24																				
ZZZZZZ			11:28																				
ZZZZZZ			11:32																				
ZZZZZZ			11:36																				
ZZZZZZ			11:40																				
ZZZZZZ			11:44																				
ZZZZZZ			11:48																				
CCV 240-243656/57			11:52																				
CCB 240-243656/58			11:56																				
CRI 240-243656/59			12:00																				
ZZZZZZ			12:09																				
ZZZZZZ			12:13																				
ZZZZZZ			12:17																				
ZZZZZZ			12:21																				
ZZZZZZ			12:25																				
ZZZZZZ			12:29																				
ZZZZZZ			12:33																				
ZZZZZZ			12:37																				
ZZZZZZ			12:41																				
CCV 240-243656/69	1		12:46	X																			
CCB 240-243656/70	1		12:50	X																			
ZZZZZZ			12:54																				
ZZZZZZ			12:58																				
ZZZZZZ			13:01																				
MB 240-242972/1-A	1	R	13:05	X																			
LCS 240-242972/2-A	1	R	13:09	X																			
CCV 240-243656/76	1		13:13	X																			
CCB 240-243656/77	1		13:17	X																			
240-68359-21	5	D	13:22	X																			
240-68359-21 SD	25	D	13:26	X																			
ZZZZZZ			13:30																				
240-68359-21 MS	5	D	13:34	X																			
240-68359-21 MSD	5	D	13:38	X																			
240-68359-22	5	D	13:42	X																			
240-68359-23	5	D	13:46	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/22/2016 08:02 End Date: 08/22/2016 19:01

Lab Sample ID	D/F	Type	Time	Analytes																			
				Be																			
240-68359-24	5	D	13:50	X																			
240-68359-25	5	D	13:54	X																			
240-68359-26	5	D	13:58	X																			
CCV 240-243656/88	1		14:02	X																			
CCB 240-243656/89	1		14:06	X																			
ZZZZZZ			14:10																				
ZZZZZZ			14:14																				
ZZZZZZ			14:19																				
ZZZZZZ			14:22																				
ZZZZZZ			14:26																				
ZZZZZZ			14:30																				
CCV 240-243656/96			14:34																				
CCB 240-243656/97			14:38																				
ZZZZZZ			14:42																				
ZZZZZZ			14:47																				
ZZZZZZ			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			14:59																				
ZZZZZZ			15:03																				
ZZZZZZ			15:07																				
ZZZZZZ			15:11																				
ZZZZZZ			15:15																				
ZZZZZZ			15:19																				
CCV 240-243656/108			15:24																				
CCB 240-243656/109			15:28																				
ZZZZZZ			15:32																				
ZZZZZZ			15:36																				
ZZZZZZ			15:40																				
ZZZZZZ			15:44																				
ZZZZZZ			15:48																				
ZZZZZZ			15:52																				
ZZZZZZ			15:56																				
ZZZZZZ			16:00																				
ZZZZZZ			16:04																				
ZZZZZZ			16:09																				
CCV 240-243656/120			16:13																				
CCB 240-243656/121			16:17																				
ZZZZZZ			16:21																				
ZZZZZZ			16:25																				
ZZZZZZ			16:29																				
ZZZZZZ			16:33																				
ZZZZZZ			16:37																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/22/2016 08:02 End Date: 08/22/2016 19:01

Lab Sample ID	D / F	Type	Time	Analytes																			
				Be																			
ZZZZZZ			16:42																				
ZZZZZZ			16:46																				
ZZZZZZ			16:50																				
ZZZZZZ			16:54																				
ZZZZZZ			16:58																				
CCV 240-243656/132			17:02																				
CCB 240-243656/133			17:06																				
ZZZZZZ			17:10																				
ZZZZZZ			17:14																				
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				
ZZZZZZ			17:27																				
ZZZZZZ			17:31																				
ZZZZZZ			17:35																				
ZZZZZZ			17:39																				
ZZZZZZ			17:43																				
ZZZZZZ			17:47																				
CCV 240-243656/144			17:51																				
CCB 240-243656/145			17:56																				
ZZZZZZ			18:00																				
ZZZZZZ			18:04																				
ZZZZZZ			18:08																				
ZZZZZZ			18:12																				
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
ZZZZZZ			18:24																				
ZZZZZZ			18:28																				
ZZZZZZ			18:32																				
ZZZZZZ			18:37																				
CCV 240-243656/156			18:41																				
CCB 240-243656/157			18:45																				
ZZZZZZ			18:49																				
ZZZZZZ			18:53																				
CCV 240-243656/160			18:57																				
CCB 240-243656/161			19:01																				

Prep Types
D = Dissolved
R = Total Recoverable

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/22/2016 End Date: 08/22/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
ICIS 240-243656/2	08:06	100		100		100		100		100	
STD1 240-243656/3 I	08:10	100		99		98		100		99	
STD2 240-243656/4 I	08:14	97		98		96		94		96	
STD3 240-243656/5 I	08:18	95		94		95		92		93	
STD4 240-243656/6 I	08:22	96		95		95		97		96	
ICV 240-243656/7	08:26	97		96		96		94		96	
ICB 240-243656/8	08:30	99		95		96		97		97	
CRI 240-243656/9	08:34	98		95		97		96		98	
ICSA 240-243656/10	08:38	93		96		95		93		93	
ICSAB 240-243656/11	08:42	89		96		93		91		94	
CCV 240-243656/69	12:46	86		109		106		110		105	
CCB 240-243656/70	12:50	94		106		108		112		108	
MB 240-242972/1-A	13:05	69		99		96		104		99	
LCS 240-242972/2-A	13:09	67		95		93		100		94	
CCV 240-243656/76	13:13	87		102		104		104		98	
CCB 240-243656/77	13:17	90		104		104		110		107	
240-68359-21	13:22	88		105		105		103		102	
240-68359-21 SD	13:26	95		108		109		110		108	
240-68359-21 MS	13:34	89		106		107		104		103	
240-68359-21 MSD	13:38	90		110		106		108		104	
240-68359-22	13:42	90		110		108		104		104	
240-68359-23	13:46	91		108		107		105		105	
240-68359-24	13:50	91		110		107		104		104	
240-68359-25	13:54	88		106		105		101		102	
240-68359-26	13:58	96		110		113		104		104	
CCV 240-243656/88	14:02	94		111		107		109		107	
CCB 240-243656/89	14:06	97		105		105		112		107	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/22/2016 End Date: 08/22/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-243656/2	08:06	100		100		100					
STD1 240-243656/3 I	08:10	102		101		101					
STD2 240-243656/4 I	08:14	99		98		97					
STD3 240-243656/5 I	08:18	98		96		95					
STD4 240-243656/6 I	08:22	98		98		97					
ICV 240-243656/7	08:26	99		98		98					
ICB 240-243656/8	08:30	101		99		99					
CRI 240-243656/9	08:34	100		99		101					
ICSA 240-243656/10	08:38	100		98		99					
ICSAB 240-243656/11	08:42	99		99		98					
CCV 240-243656/69	12:46	112		111		111					
CCB 240-243656/70	12:50	114		112		113					
MB 240-242972/1-A	13:05	106		106		111					
LCS 240-242972/2-A	13:09	105		103		106					
CCV 240-243656/76	13:13	105		106		106					
CCB 240-243656/77	13:17	110		111		111					
240-68359-21	13:22	110		109		105					
240-68359-21 SD	13:26	113		112		112					
240-68359-21 MS	13:34	110		109		105					
240-68359-21 MSD	13:38	114		113		110					
240-68359-22	13:42	110		109		106					
240-68359-23	13:46	108		109		104					
240-68359-24	13:50	109		107		103					
240-68359-25	13:54	106		106		101					
240-68359-26	13:58	108		107		103					
CCV 240-243656/88	14:02	111		111		109					
CCB 240-243656/89	14:06	112		110		110					

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	ICV 240-243656/7 08/22/2016 08:26				CCV 240-243656/69 08/22/2016 12:46				CCV 240-243656/76 08/22/2016 13:13			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Beryllium	40.8		40.0	102	45.4		50.0	91	45.1		50.0	90
Antimony	39.5		40.0	99	50.6		50.0	101	53.9		50.0	108
Arsenic	40.0		40.0	100	51.1		50.0	102	54.5		50.0	109
Barium	40.1		40.0	100	50.3		50.0	101	53.4		50.0	107
Cadmium	39.7		40.0	99	51.0		50.0	102	53.9		50.0	108
Calcium	20000		20000	100	24200		25000	97	25600		25000	102
Chromium	39.9		40.0	100	50.3		50.0	101	53.6		50.0	107
Cobalt	40.1		40.0	100	51.0		50.0	102	53.7		50.0	107
Copper	40.8		40.0	102	51.8		50.0	104	54.9		50.0	110
Lead	40.0		40.0	100	49.6		50.0	99	52.2		50.0	104
Magnesium	20100		20000	101	25400		25000	102	26700		25000	107
Molybdenum	40.1		40.0	100	49.9		50.0	100	53.0		50.0	106
Nickel	40.2		40.0	101	50.9		50.0	102	53.9		50.0	108
Selenium	39.6		40.0	99	49.4		50.0	99	51.3		50.0	103
Silver	40.0		40.0	100	49.1		50.0	98	51.4		50.0	103
Thallium	39.5		40.0	99	49.3		50.0	99	52.0		50.0	104
Tungsten	38.4		40.0	96	50.0		50.0	100	54.7		50.0	109
Vanadium	40.1		40.0	100	49.4		50.0	99	53.0		50.0	106
Zinc	40.7		40.0	102	50.7		50.0	101	53.6		50.0	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTMSICVW_00069 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00174

Analyte	CCV 240-243656/88 08/22/2016 14:02											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Beryllium	47.2		50.0	94								
Antimony	50.7		50.0	101								
Arsenic	51.7		50.0	103								
Barium	50.8		50.0	102								
Cadmium	50.2		50.0	100								
Calcium	24300		25000	97								
Chromium	50.1		50.0	100								
Cobalt	50.4		50.0	101								
Copper	50.8		50.0	102								
Lead	49.2		50.0	98								
Magnesium	25300		25000	101								
Molybdenum	50.7		50.0	101								
Nickel	50.2		50.0	100								
Selenium	49.0		50.0	98								
Silver	49.4		50.0	99								
Thallium	48.9		50.0	98								
Tungsten	49.2		50.0	98								
Vanadium	49.9		50.0	100								
Zinc	50.5		50.0	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-243656/8 08/22/2016 08:30		CCB 240-243656/70 08/22/2016 12:50		CCB 240-243656/77 08/22/2016 13:17		CCB 240-243656/89 08/22/2016 14:06	
		Found	C	Found	C	Found	C	Found	C
Beryllium	1.0	1.0	U	0.0790	J	0.182	J	0.0900	J
Antimony	2.0	0.232	J	0.208	J	0.324	J	0.216	J
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Cadmium	1.0	1.0	U	1.0	U	0.0990	J	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	0.0370	J	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	0.457	J	0.503	J	0.545	J	0.466	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	0.320	J	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	1.0	U	1.0	U	0.0940	J	1.0	U
Tungsten	10	0.853	J	0.833	J	1.03	J	0.789	J
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSA 240-243656/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00072

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Beryllium		**-0.0110**	
Aluminum	*50000*	*51047*	*102*
Antimony		*0.0590*	
Arsenic		*0.0580*	
Barium		*0.0340*	
Boron		*-1.47*	
Cadmium		*0.0190*	
Calcium	*50000*	*49239*	*98*
Chromium		*0.638*	
Cobalt		*0.0050*	
Copper		*0.271*	
Iron	*50000*	*48943*	*98*
Lead		*0.107*	
Lithium		*-0.0030*	
Magnesium	*50000*	*48820*	*98*
Manganese		*0.314*	
Molybdenum	*1000*	*1023*	*102*
Nickel		*0.141*	
Potassium	*50000*	*48867*	*98*
Selenium		*0.265*	
Silver		*0.0090*	
Sodium	*50000*	*48799*	*98*
Strontium		*0.297*	
Thallium		*0.0050*	
Tin		*0.829*	
Titanium	*1000*	*985*	*98*
Tungsten		*0.310*	
Vanadium		*-0.0660*	
Zinc		*1.23*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Lab Sample ID: ICSAB 240-243656/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00069

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Beryllium	**100**	**104**	**104**
Aluminum	*50000*	*50701*	*101*
Antimony	*100*	*101*	*101*
Arsenic	*100*	*102*	*102*
Barium	*100*	*101*	*101*
Boron	*100*	*107*	*107*
Cadmium	*100*	*99.8*	*100*
Calcium	*50000*	*49129*	*98*
Chromium	*100*	*99.6*	*100*
Cobalt	*100*	*100*	*100*
Copper	*100*	*100.0*	*100*
Iron	*50000*	*49328*	*99*
Lead	*100*	*99.3*	*99*
Lithium	*100*	*103*	*103*
Magnesium	*50000*	*48415*	*97*
Manganese	*100*	*101*	*101*
Molybdenum	*1100*	*1163*	*106*
Nickel	*100*	*100*	*100*
Potassium	*50000*	*48833*	*98*
Selenium	*100*	*96.8*	*97*
Silver	*100*	*101*	*101*
Sodium	*50000*	*48062*	*96*
Strontium	*100*	*99.6*	*100*
Thallium	*100*	*97.1*	*97*
Tin	*100*	*99.5*	*99*
Titanium	*1100*	*1088*	*99*
Tungsten	*100*	*102*	*102*
Vanadium	*100*	*98.9*	*99*
Zinc	*100*	*100*	*100*

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

FORM IVA-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/18/2016 10:38 End Date: 08/18/2016 16:34

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 240-243161/1-A			10:38	X																			
IC 240-243161/2-A			10:40	X																			
IC 240-243161/3-A			10:43	X																			
IC 240-243161/4-A			10:45	X																			
IC 240-243161/5-A			10:47	X																			
IC 240-243161/6-A			10:49	X																			
ICV 240-243161/7-A	1		10:51	X																			
ICB 240-243161/8-A	1		10:54	X																			
CRA 240-243161/9-A	1		10:56	X																			
CCV 240-243161/10-A			10:58																				
CCB 240-243161/11-A			11:01																				
ZZZZZZ			11:03																				
ZZZZZZ			11:05																				
ZZZZZZ			11:07																				
ZZZZZZ			11:09																				
ZZZZZZ			11:11																				
ZZZZZZ			11:14																				
ZZZZZZ			11:16																				
ZZZZZZ			11:18																				
ZZZZZZ			11:22																				
ZZZZZZ			11:24																				
CCV 240-243161/10-A			11:26																				
CCB 240-243161/11-A			11:28																				
ZZZZZZ			11:30																				
ZZZZZZ			11:32																				
CCV 240-243161/10-A			11:34																				
CCB 240-243161/11-A			11:37																				
CCV 240-243161/10-A			12:03																				
CCB 240-243161/11-A			12:05																				
ZZZZZZ			12:08																				
ZZZZZZ			12:11																				
ZZZZZZ			12:13																				
ZZZZZZ			12:16																				
ZZZZZZ			12:18																				
ZZZZZZ			12:20																				
ZZZZZZ			12:23																				
ZZZZZZ			12:25																				
ZZZZZZ			12:27																				
ZZZZZZ			12:30																				
CCV 240-243161/10-A			12:32																				
CCB 240-243161/11-A			12:34																				
ZZZZZZ			12:36																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/18/2016 10:38 End Date: 08/18/2016 16:34

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			12:38																				
ZZZZZZ			12:41																				
ZZZZZZ			12:43																				
ZZZZZZ			12:45																				
ZZZZZZ			12:47																				
ZZZZZZ			12:50																				
ZZZZZZ			12:52																				
ZZZZZZ			12:54																				
ZZZZZZ			12:56																				
CCV 240-243161/10-A			12:59																				
CCB 240-243161/11-A			13:01																				
ZZZZZZ			13:03																				
ZZZZZZ			13:05																				
ZZZZZZ			13:07																				
ZZZZZZ			13:09																				
ZZZZZZ			13:11																				
ZZZZZZ			13:13																				
ZZZZZZ			13:16																				
ZZZZZZ			13:18																				
ZZZZZZ			13:20																				
ZZZZZZ			13:23																				
CCV 240-243161/10-A			13:25																				
CCB 240-243161/11-A			13:27																				
ZZZZZZ			13:29																				
ZZZZZZ			13:32																				
ZZZZZZ			13:34																				
ZZZZZZ			13:37																				
ZZZZZZ			13:39																				
ZZZZZZ			13:42																				
ZZZZZZ			13:44																				
ZZZZZZ			13:46																				
ZZZZZZ			13:49																				
ZZZZZZ			13:51																				
CCV 240-243161/10-A			13:54																				
CCB 240-243161/11-A			13:56																				
CCV 240-243161/10-A	1		14:05	X																			
CCB 240-243161/11-A	1		14:07	X																			
ZZZZZZ			14:09																				
MB 240-242974/1-A	1	T	14:12	X																			
LCS 240-242974/2-A	1	T	14:14	X																			
240-68359-21	1	D	14:17	X																			
240-68359-21 MS	1	D	14:19	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/18/2016 10:38 End Date: 08/18/2016 16:34

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
240-68359-21 MSD	1	D	14:21	X																			
240-68359-22	1	D	14:24	X																			
240-68359-23	1	D	14:26	X																			
240-68359-24	1	D	14:28	X																			
240-68359-25	1	D	14:30	X																			
CCV 240-243161/10-A	1		14:32	X																			
CCB 240-243161/11-A	1		14:34	X																			
240-68359-26	1	D	14:37	X																			
240-68359-27	1	D	14:39	X																			
240-68359-28	1	D	14:41	X																			
240-68359-29	1	D	14:43	X																			
240-68359-30	1	D	14:46	X																			
240-68359-31	1	D	14:49	X																			
240-68359-32	1	D	14:51	X																			
240-68359-33	1	D	14:53	X																			
240-68359-34	1	D	14:56	X																			
240-68359-35	1	D	14:58	X																			
CCV 240-243161/10-A	1		15:00	X																			
CCB 240-243161/11-A	1		15:03	X																			
240-68359-36	1	D	15:05	X																			
ZZZZZZ			15:07																				
MB 240-242967/1-A	1	T	15:09	X																			
LCS 240-242967/2-A	1	T	15:12	X																			
240-68359-1	1	D	15:14	X																			
240-68359-1 MS	1	D	15:16	X																			
240-68359-1 MSD	1	D	15:18	X																			
240-68359-2	1	D	15:22	X																			
240-68359-3	1	D	15:25	X																			
240-68359-4	1	D	15:27	X																			
CCV 240-243161/10-A	1		15:29	X																			
CCB 240-243161/11-A	1		15:32	X																			
240-68359-5	1	D	15:34	X																			
240-68359-6	1	D	15:36	X																			
240-68359-7	1	D	15:39	X																			
240-68359-8	1	D	15:41	X																			
240-68359-9	1	D	15:43	X																			
240-68359-10	1	D	15:45	X																			
240-68359-11	1	D	15:48	X																			
240-68359-12	1	D	15:51	X																			
240-68359-13	1	D	15:53	X																			
240-68359-14	1	D	15:55	X																			
CCV 240-243161/10-A	1		15:57	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/18/2016 10:38 End Date: 08/18/2016 16:34

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCB 240-243161/11-A	1		16:00	X																			
240-68359-15	1	D	16:02	X																			
240-68359-16	1	D	16:04	X																			
240-68359-17	1	D	16:06	X																			
240-68359-18	1	D	16:09	X																			
240-68359-19	1	D	16:11	X																			
240-68359-20	1	D	16:14	X																			
ZZZZZZ			16:16																				
ZZZZZZ			16:18																				
ZZZZZZ			16:20																				
ZZZZZZ			16:22																				
CCV 240-243161/10-A	1		16:25	X																			
CCB 240-243161/11-A	1		16:27	X																			
ZZZZZZ			16:29																				
CCV 240-243161/10-A			16:32																				
CCB 240-243161/11-A			16:34																				

Prep Types

D = Dissolved

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTHgICV_00001_00053 Concentration Units: ug/L

CCV Source: MTHGCALW_01289

Analyte	ICV 240-243161/7-A 08/18/2016 10:51				CCV 240-243161/10-A 08/18/2016 14:05				CCV 240-243161/10-A 08/18/2016 14:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.73		5.00	95	4.96		5.00	99	4.90		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTHgICV_00001_00053 Concentration Units: ug/L

CCV Source: MTHGCALW_01289

Analyte	CCV 240-243161/10-A 08/18/2016 15:00				CCV 240-243161/10-A 08/18/2016 15:29				CCV 240-243161/10-A 08/18/2016 15:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.96		5.00	99	4.94		5.00	99	4.88		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

ICV Source: MTHgICV_00001_00053 Concentration Units: ug/L

CCV Source: MTHGCALW_01289

Analyte	CCV 240-243161/10-A 08/18/2016 16:25											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.85		5.00	97								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-243161/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01289

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.230		115	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-243161/8-A 08/18/2016 10:54		CCB 240-243161/11-A 08/18/2016 14:07		CCB 240-243161/11-A 08/18/2016 14:34		CCB 240-243161/11-A 08/18/2016 15:03	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-243161/11-A 08/18/2016 15:32		CCB 240-243161/11-A 08/18/2016 16:00		CCB 240-243161/11-A 08/18/2016 16:27			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-242964/1-A	08/17/2016 09:21	242964		50	50
LCS 240-242964/2-A	08/17/2016 09:21	242964		50	50
240-68359-1	08/17/2016 09:21	242964		50	50
240-68359-1 MS	08/17/2016 09:21	242964		50	50
240-68359-1 MSD	08/17/2016 09:21	242964		50	50
240-68359-2	08/17/2016 09:21	242964		50	50
240-68359-3	08/17/2016 09:21	242964		50	50
240-68359-4	08/17/2016 09:21	242964		50	50
240-68359-5	08/17/2016 09:21	242964		50	50
240-68359-6	08/17/2016 09:21	242964		50	50
240-68359-7	08/17/2016 09:21	242964		50	50
240-68359-8	08/17/2016 09:21	242964		50	50
240-68359-9	08/17/2016 09:21	242964		50	50
240-68359-10	08/17/2016 09:21	242964		50	50
240-68359-11	08/17/2016 09:21	242964		50	50
240-68359-12	08/17/2016 09:21	242964		50	50
240-68359-13	08/17/2016 09:21	242964		50	50
240-68359-14	08/17/2016 09:21	242964		50	50
240-68359-15	08/17/2016 09:21	242964		50	50
240-68359-16	08/17/2016 09:21	242964		50	50
240-68359-17	08/17/2016 09:21	242964		50	50
240-68359-18	08/17/2016 09:21	242964		50	50
240-68359-19	08/17/2016 09:21	242964		50	50
240-68359-20	08/17/2016 09:21	242964		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-242964/1-A

Instrument Code: I10 Batch No.: 243331

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	5.0	U		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	2.0	U		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	1.0	U		6020
7440-28-0	Thallium	1.0	U		6020
7440-62-2	Vanadium	5.0	U		6020
7440-66-6	Zinc	20	U		6020
7440-70-2	Calcium	1000	U		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	10	U		6020

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-242964/2-A

Lab Name: TestAmerica Canton Job No.: 240-68359-1

Sample Matrix: Water LCS Source: MTICPMSB_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	99.1		99	80	120		6020
Arsenic	1000	1010		101	80	120		6020
Barium	1000	982		98	80	120		6020
Beryllium	1000	1020		102	80	120		6020
Cadmium	1000	1040		104	80	120		6020
Chromium	1000	1060		106	80	120		6020
Cobalt	1000	1090		109	80	120		6020
Copper	1000	1120		112	80	120		6020
Lead	1000	1050		105	80	120		6020
Molybdenum	100	101		101	80	120		6020
Nickel	1000	1070		107	80	120		6020
Selenium	1000	971		97	80	120		6020
Silver	100	99.8		100	80	120		6020
Thallium	250	252		101	80	120		6020
Vanadium	1000	1080		108	80	120		6020
Zinc	1000	1040		104	80	120		6020
Calcium	10000	9580		96	80	120		6020
Magnesium	10000	10000		100	80	120		6020
Tungsten	100	104		104	80	120		6020

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

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW37A-081516 MS
Lab ID: 240-68359-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-68359-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	104		2.8	J	100	101	75-125		6020
Arsenic	1030		2.9	J	1000	103	75-125		6020
Barium	1020		34		1000	99	75-125		6020
Beryllium	989		2.0	J	1000	99	75-125		6020
Cadmium	982		5.0	U	1000	98	75-125		6020
Chromium	1010		10	U	1000	101	75-125		6020
Cobalt	1010		0.88	J	1000	101	75-125		6020
Copper	1020		5.3	J	1000	102	75-125		6020
Lead	1020		5.0	U	1000	102	75-125		6020
Molybdenum	110		5.0	J	100	105	75-125		6020
Nickel	1020		2.3	J	1000	102	75-125		6020
Selenium	968		25	U	1000	97	75-125		6020
Silver	98.2		5.0	U	100	98	75-125		6020
Thallium	236		5.0	U	250	94	75-125		6020
Vanadium	1020		25	U	1000	102	75-125		6020
Zinc	991		100	U	1000	99	75-125		6020
Calcium	63100		52000		10000	112	75-125	4	6020
Magnesium	169000		150000		10000	158	75-125	4	6020
Tungsten	104		6.2	J	100	97	75-125		6020
Mercury	1.31		0.20	U	1.00	131	80-120	F1	7470A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW37A-081516 MSD | Lab ID: 240-68359-1 MSD

Lab Name: TestAmerica Canton | Job No.: 240-68359-1

SDG No.:

Matrix: Water | Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	99.6		100	97	75-125	4	20		6020
Arsenic	1020		1000	102	75-125	1	20		6020
Barium	1020		1000	98	75-125	1	20		6020
Beryllium	1010		1000	101	75-125	2	20		6020
Cadmium	981		1000	98	75-125	0	20		6020
Chromium	1000		1000	100	75-125	1	20		6020
Cobalt	999		1000	100	75-125	1	20		6020
Copper	1010		1000	100	75-125	1	20		6020
Lead	1010		1000	101	75-125	1	20		6020
Molybdenum	108		100	103	75-125	1	20		6020
Nickel	1000		1000	100	75-125	1	20		6020
Selenium	957		1000	96	75-125	1	20		6020
Silver	98.4		100	98	75-125	0	20		6020
Thallium	232		250	93	75-125	2	20		6020
Vanadium	1010		1000	101	75-125	1	20		6020
Zinc	969		1000	97	75-125	2	20		6020
Calcium	64000		10000	121	75-125	1	20	4	6020
Magnesium	167000		10000	143	75-125	1	20	4	6020
Tungsten	98.8		100	93	75-125	5	20		6020
Mercury	1.21		1.00	121	80-120	8	20	F1	7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-68359-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-68359-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.8	J	50	U	NC		6020
Arsenic	2.9	J	130	U	NC		6020
Barium	34		34.9	J	NC		6020
Beryllium	2.0	J	25	U	NC		6020
Cadmium	5.0	U	25	U	NC		6020
Chromium	10	U	50	U	NC		6020
Cobalt	0.88	J	25	U	NC		6020
Copper	5.3	J	50	U	NC		6020
Lead	5.0	U	25	U	NC		6020
Molybdenum	5.0	J	250	U	NC		6020
Nickel	2.3	J	50	U	NC		6020
Selenium	25	U	130	U	NC		6020
Silver	5.0	U	25	U	NC		6020
Thallium	5.0	U	25	U	NC		6020
Vanadium	25	U	130	U	NC		6020
Zinc	100	U	500	U	NC		6020
Calcium	52000		52300		NC		6020
Magnesium	150000		158000		NC		6020
Tungsten	6.2	J	250	U	NC		6020

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

FORM VIII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-242972/1-A	08/17/2016 09:40	242972		50	50
LCS 240-242972/2-A	08/17/2016 09:40	242972		50	50
240-68359-21	08/17/2016 09:40	242972		50	50
240-68359-21 MS	08/17/2016 09:40	242972		50	50
240-68359-21 MSD	08/17/2016 09:40	242972		50	50
240-68359-22	08/17/2016 09:40	242972		50	50
240-68359-23	08/17/2016 09:40	242972		50	50
240-68359-24	08/17/2016 09:40	242972		50	50
240-68359-25	08/17/2016 09:40	242972		50	50
240-68359-26	08/17/2016 09:40	242972		50	50
240-68359-27	08/17/2016 09:40	242972		50	50
240-68359-28	08/17/2016 09:40	242972		50	50
240-68359-29	08/17/2016 09:40	242972		50	50
240-68359-30	08/17/2016 09:40	242972		50	50
240-68359-31	08/17/2016 09:40	242972		50	50
240-68359-32	08/17/2016 09:40	242972		50	50
240-68359-33	08/17/2016 09:40	242972		50	50
240-68359-34	08/17/2016 09:40	242972		50	50
240-68359-35	08/17/2016 09:40	242972		50	50
240-68359-36	08/17/2016 09:40	242972		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-242972/1-A

Instrument Code: I10 Batch No.: 243587

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	5.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	0.315	J		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	2.0	U		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	1.0	U		6020
7440-28-0	Thallium	1.0	U		6020
7440-62-2	Vanadium	5.0	U		6020
7440-66-6	Zinc	20	U		6020
7440-70-2	Calcium	1000	U		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	10	U		6020

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-242972/1-A

Instrument Code: I10 Batch No.: 243656

CAS No.	Analyte	Concentration	C	Q	Method
7440-41-7	Beryllium	1.0	U		6020

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-242972/2-A

Lab Name: TestAmerica Canton Job No.: 240-68359-1

Sample Matrix: Water LCS Source: MTICPMSB_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	99.8		100	80	120		6020
Arsenic	1000	997		100	80	120		6020
Barium	1000	1010		101	80	120		6020
Cadmium	1000	1040		104	80	120		6020
Chromium	1000	1050		105	80	120		6020
Cobalt	1000	1080		108	80	120		6020
Copper	1000	1090		109	80	120		6020
Lead	1000	1050		105	80	120		6020
Molybdenum	100	97.6		98	80	120		6020
Nickel	1000	1100		110	80	120		6020
Selenium	1000	949		95	80	120		6020
Silver	100	100		100	80	120		6020
Thallium	250	254		101	80	120		6020
Vanadium	1000	1070		107	80	120		6020
Zinc	1000	1040		104	80	120		6020
Calcium	10000	9390		94	80	120		6020
Magnesium	10000	9500		95	80	120		6020
Tungsten	100	99.2		99	80	120		6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-242972/2-A

Lab Name: TestAmerica Canton Job No.: 240-68359-1

Sample Matrix: Water LCS Source: MTICPMSA_00028

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Beryllium	1000	935		94	80	120		6020

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

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW42A-081516 MS
Lab ID: 240-68359-21 MS
Lab Name: TestAmerica Canton
Job No.: 240-68359-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	102		10	U	100	102	75-125		6020
Arsenic	980		2.0	J	1000	98	75-125		6020
Barium	1030		37		1000	99	75-125		6020
Beryllium	913		5.0	U	1000	91	75-125		6020
Cadmium	967		5.0	U	1000	97	75-125		6020
Chromium	974		10	U	1000	97	75-125		6020
Cobalt	993		5.0	U	1000	99	75-125		6020
Copper	992		4.7	J	1000	99	75-125		6020
Lead	988		5.0	U	1000	99	75-125		6020
Molybdenum	107		50	U	100	107	75-125		6020
Nickel	993		2.1	J	1000	99	75-125		6020
Selenium	933		25	U	1000	93	75-125		6020
Silver	98.1		5.0	U	100	98	75-125		6020
Thallium	233		5.0	U	250	93	75-125		6020
Vanadium	984		25	U	1000	98	75-125		6020
Zinc	986		100	U	1000	99	75-125		6020
Calcium	63300		54000		10000	94	75-125	4	6020
Magnesium	156000		150000		10000	68	75-125	4	6020
Tungsten	104		50	U	100	104	75-125		6020
Mercury	1.04		0.20	U	1.00	104	80-120		7470A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW42A-081516 MSD
Lab ID: 240-68359-21 MSD
Lab Name: TestAmerica Canton
Job No.: 240-68359-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	99.1		100	99	75-125	3	20		6020
Arsenic	977		1000	97	75-125	0	20		6020
Barium	1020		1000	98	75-125	1	20		6020
Beryllium	893		1000	89	75-125	2	20		6020
Cadmium	956		1000	96	75-125	1	20		6020
Chromium	963		1000	96	75-125	1	20		6020
Cobalt	976		1000	98	75-125	2	20		6020
Copper	982		1000	98	75-125	1	20		6020
Lead	978		1000	98	75-125	1	20		6020
Molybdenum	104		100	104	75-125	4	20		6020
Nickel	973		1000	97	75-125	2	20		6020
Selenium	921		1000	92	75-125	1	20		6020
Silver	98.3		100	98	75-125	0	20		6020
Thallium	231		250	93	75-125	1	20		6020
Vanadium	972		1000	97	75-125	1	20		6020
Zinc	965		1000	97	75-125	2	20		6020
Calcium	62300		10000	85	75-125	1	20	4	6020
Magnesium	152000		10000	37	75-125	2	20	4	6020
Tungsten	95.0		100	95	75-125	9	20		6020
Mercury	1.04		1.00	104	80-120	0	20		7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-68359-21

SDG No:

Lab Name: TestAmerica Canton Job No: 240-68359-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	10	U	50	U	NC		6020
Arsenic	2.0	J	130	U	NC		6020
Barium	37		37.9	J	NC		6020
Beryllium	5.0	U	25	U	NC		6020
Cadmium	5.0	U	25	U	NC		6020
Chromium	10	U	50	U	NC		6020
Cobalt	5.0	U	25	U	NC		6020
Copper	4.7	J	50	U	NC		6020
Lead	5.0	U	25	U	NC		6020
Molybdenum	50	U	250	U	NC		6020
Nickel	2.1	J	50	U	NC		6020
Selenium	25	U	130	U	NC		6020
Silver	5.0	U	25	U	NC		6020
Thallium	5.0	U	25	U	NC		6020
Vanadium	25	U	130	U	NC		6020
Zinc	100	U	500	U	NC		6020
Calcium	54000		56000		NC		6020
Magnesium	150000		153000		NC		6020
Tungsten	50	U	250	U	NC		6020

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

FORM VIII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-242967/1-A	08/17/2016 14:00	242967		50	50
LCS 240-242967/2-A	08/17/2016 14:00	242967		50	50
240-68359-1	08/17/2016 14:00	242967		50	50
240-68359-1 MS	08/17/2016 14:00	242967		50	50
240-68359-1 MSD	08/17/2016 14:00	242967		50	50
240-68359-2	08/17/2016 14:00	242967		50	50
240-68359-3	08/17/2016 14:00	242967		50	50
240-68359-4	08/17/2016 14:00	242967		50	50
240-68359-5	08/17/2016 14:00	242967		50	50
240-68359-6	08/17/2016 14:00	242967		50	50
240-68359-7	08/17/2016 14:00	242967		50	50
240-68359-8	08/17/2016 14:00	242967		50	50
240-68359-9	08/17/2016 14:00	242967		50	50
240-68359-10	08/17/2016 14:00	242967		50	50
240-68359-11	08/17/2016 14:00	242967		50	50
240-68359-12	08/17/2016 14:00	242967		50	50
240-68359-13	08/17/2016 14:00	242967		50	50
240-68359-14	08/17/2016 14:00	242967		50	50
240-68359-15	08/17/2016 14:00	242967		50	50
240-68359-16	08/17/2016 14:00	242967		50	50
240-68359-17	08/17/2016 14:00	242967		50	50
240-68359-18	08/17/2016 14:00	242967		50	50
240-68359-19	08/17/2016 14:00	242967		50	50
240-68359-20	08/17/2016 14:00	242967		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-242967/1-A

Instrument Code: H1 Batch No.: 243327

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-242967/2-A

Lab Name: TestAmerica Canton Job No.: 240-68359-1

Sample Matrix: Water LCS Source: MTHGCALW_01289

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.69		114	80	120		7470A

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

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-242974/1-A	08/17/2016 14:00	242974		50	50
LCS 240-242974/2-A	08/17/2016 14:00	242974		50	50
240-68359-21	08/17/2016 14:00	242974		50	50
240-68359-21 MS	08/17/2016 14:00	242974		50	50
240-68359-21 MSD	08/17/2016 14:00	242974		50	50
240-68359-22	08/17/2016 14:00	242974		50	50
240-68359-23	08/17/2016 14:00	242974		50	50
240-68359-24	08/17/2016 14:00	242974		50	50
240-68359-25	08/17/2016 14:00	242974		50	50
240-68359-26	08/17/2016 14:00	242974		50	50
240-68359-27	08/17/2016 14:00	242974		50	50
240-68359-28	08/17/2016 14:00	242974		50	50
240-68359-29	08/17/2016 14:00	242974		50	50
240-68359-30	08/17/2016 14:00	242974		50	50
240-68359-31	08/17/2016 14:00	242974		50	50
240-68359-32	08/17/2016 14:00	242974		50	50
240-68359-33	08/17/2016 14:00	242974		50	50
240-68359-34	08/17/2016 14:00	242974		50	50
240-68359-35	08/17/2016 14:00	242974		50	50
240-68359-36	08/17/2016 14:00	242974		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-242974/1-A

Instrument Code: H1 Batch No.: 243327

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-242974/2-A

Lab Name: TestAmerica Canton Job No.: 240-68359-1

Sample Matrix: Water LCS Source: MTHGCALW_01289

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.98		100	80	120		7470A

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

FORM VIIA - IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2340B

Start Date: 08/23/2016 12:50 End Date: 08/23/2016 12:50

Lab Sample Id	D/F	Type	Time	Analytes																												
				CaCO3	HardCC	MgHARD																											
ZZZZZZ			12:50																													
ZZZZZZ			12:50																													
ZZZZZZ			12:50																													
ZZZZZZ			12:50																													
240-68359-1	1	D	12:50	X	X	X																										
240-68359-2	1	D	12:50	X	X	X																										
240-68359-3	1	D	12:50	X	X	X																										
240-68359-4	1	D	12:50	X	X	X																										
240-68359-5	1	D	12:50	X	X	X																										
240-68359-6	1	D	12:50	X	X	X																										
240-68359-7	1	D	12:50	X	X	X																										
240-68359-8	1	D	12:50	X	X	X																										
240-68359-9	1	D	12:50	X	X	X																										
240-68359-10	1	D	12:50	X	X	X																										
240-68359-11	1	D	12:50	X	X	X																										
240-68359-12	1	D	12:50	X	X	X																										
240-68359-13	1	D	12:50	X	X	X																										
240-68359-14	1	D	12:50	X	X	X																										
240-68359-15	1	D	12:50	X	X	X																										
240-68359-16	1	D	12:50	X	X	X																										
240-68359-17	1	D	12:50	X	X	X																										
240-68359-18	1	D	12:50	X	X	X																										
240-68359-19	1	D	12:50	X	X	X																										
240-68359-20	1	D	12:50	X	X	X																										
240-68359-21	1	D	12:50	X	X	X																										
240-68359-22	1	D	12:50	X	X	X																										
240-68359-23	1	D	12:50	X	X	X																										
240-68359-24	1	D	12:50	X	X	X																										
240-68359-25	1	D	12:50	X	X	X																										
240-68359-26	1	D	12:50	X	X	X																										
240-68359-27	1	D	12:50	X	X	X																										
240-68359-28	1	D	12:50	X	X	X																										
240-68359-29	1	D	12:50	X	X	X																										
240-68359-30	1	D	12:50	X	X	X																										
240-68359-31	1	D	12:50	X	X	X																										
240-68359-32	1	D	12:50	X	X	X																										
240-68359-33	1	D	12:50	X	X	X																										
240-68359-34	1	D	12:50	X	X	X																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2340B

Start Date: 08/23/2016 12:50 End Date: 08/23/2016 12:50

Lab Sample Id	D/F	Type	Time	Analytes																										
				CaCO3	HardCC	MgHARD																								
240-68359-35	1	D	12:50	X	X	X																								
240-68359-36	1	D	12:50	X	X	X																								

Prep Types:
D = Dissolved

FORM XIII-IN

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242964 Batch Start Date: 08/17/16 09:21 Batch Analyst: Dillon, William K

Batch Method: 3005A Batch End Date: 08/17/16 17:21

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00026	MTICPMSA 00028	MTICPMSB 00029	MTTMHCL 00126
MB 240-242964/1		3005A, 6020		50 mL	50 mL				2.5 mL
LCS 240-242964/2		3005A, 6020		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-68359-D-1	MSA-SW37A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-1 MS	MSA-SW37A-081516	3005A, 6020	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-68359-D-1 MSD	MSA-SW37A-081516	3005A, 6020	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-68359-D-2	MSA-SW37B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-3	MSA-SW37C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-4	MSA-SW37D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-5	MSA-SW38A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-6	MSA-SW38B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-7	MSA-SW38C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-8	MSA-SW38D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-9	MSA-SW39A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-10	MSA-SW39B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-11	MSA-SW39C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-12	MSA-SW39D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-13	MSA-SW40A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-14	MSA-SW40B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-15	MSA-SW40C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-16	MSA-SW40D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-17	MSA-SW41A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-18	MSA-SW41B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-19	MSA-SW41C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-20	MSA-SW41D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
MB 240-242964/1		3005A, 6020		1 mL					
LCS 240-242964/2		3005A, 6020		1 mL					

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242964 Batch Start Date: 08/17/16 09:21 Batch Analyst: Dillon, William K

Batch Method: 3005A Batch End Date: 08/17/16 17:21

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
240-68359-D-1	MSA-SW37A-081516	3005A, 6020	D	1 mL					
240-68359-D-1 MS	MSA-SW37A-081516	3005A, 6020	D	1 mL					
240-68359-D-1 MSD	MSA-SW37A-081516	3005A, 6020	D	1 mL					
240-68359-D-2	MSA-SW37B-081516	3005A, 6020	D	1 mL					
240-68359-D-3	MSA-SW37C-081516	3005A, 6020	D	1 mL					
240-68359-D-4	MSA-SW37D-081516	3005A, 6020	D	1 mL					
240-68359-D-5	MSA-SW38A-081516	3005A, 6020	D	1 mL					
240-68359-D-6	MSA-SW38B-081516	3005A, 6020	D	1 mL					
240-68359-D-7	MSA-SW38C-081516	3005A, 6020	D	1 mL					
240-68359-D-8	MSA-SW38D-081516	3005A, 6020	D	1 mL					
240-68359-D-9	MSA-SW39A-081516	3005A, 6020	D	1 mL					
240-68359-D-10	MSA-SW39B-081516	3005A, 6020	D	1 mL					
240-68359-D-11	MSA-SW39C-081516	3005A, 6020	D	1 mL					
240-68359-D-12	MSA-SW39D-081516	3005A, 6020	D	1 mL					
240-68359-D-13	MSA-SW40A-081516	3005A, 6020	D	1 mL					
240-68359-D-14	MSA-SW40B-081516	3005A, 6020	D	1 mL					
240-68359-D-15	MSA-SW40C-081516	3005A, 6020	D	1 mL					
240-68359-D-16	MSA-SW40D-081516	3005A, 6020	D	1 mL					
240-68359-D-17	MSA-SW41A-081516	3005A, 6020	D	1 mL					
240-68359-D-18	MSA-SW41B-081516	3005A, 6020	D	1 mL					
240-68359-D-19	MSA-SW41C-081516	3005A, 6020	D	1 mL					
240-68359-D-20	MSA-SW41D-081516	3005A, 6020	D	1 mL					

Batch Notes	
Filter Paper ID	9699375
Hot Block ID	HB4
Pipette ID	MP3
Digestion Tube/Cup ID	1512329

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242964 Batch Start Date: 08/17/16 09:21 Batch Analyst: Dillon, William K

Batch Method: 3005A Batch End Date: 08/17/16 17:21

Basis	Basis Description
D	Dissolved

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242972 Batch Start Date: 08/17/16 09:40 Batch Analyst: Dillon, William K

Batch Method: 3005A Batch End Date: 08/17/16 17:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00026	MTICPMSA 00028	MTICPMSB 00029	MTTMHCL 00126
MB 240-242972/1		3005A, 6020		50 mL	50 mL				2.5 mL
LCS 240-242972/2		3005A, 6020		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-68359-D-21	MSA-SW42A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-21 MS	MSA-SW42A-081516	3005A, 6020	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-68359-D-21 MSD	MSA-SW42A-081516	3005A, 6020	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-68359-D-22	MSA-SW42B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-23	MSA-SW42C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-24	MSA-SW42D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-25	MSA-SW43A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-26	MSA-SW43B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-27	MSA-SW43C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-28	MSA-SW43D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-29	MSA-SW44A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-30	MSA-SW44B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-31	MSA-SW44C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-32	MSA-SW44D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-33	MSA-SW45A-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-34	MSA-SW45B-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-35	MSA-SW45C-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-68359-D-36	MSA-SW45D-081516	3005A, 6020	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
MB 240-242972/1		3005A, 6020		1 mL					
LCS 240-242972/2		3005A, 6020		1 mL					
240-68359-D-21	MSA-SW42A-081516	3005A, 6020	D	1 mL					
240-68359-D-21 MS	MSA-SW42A-081516	3005A, 6020	D	1 mL					
240-68359-D-21 MSD	MSA-SW42A-081516	3005A, 6020	D	1 mL					
240-68359-D-22	MSA-SW42B-081516	3005A, 6020	D	1 mL					

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242972 Batch Start Date: 08/17/16 09:40 Batch Analyst: Dillon, William K

Batch Method: 3005A Batch End Date: 08/17/16 17:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
240-68359-D-23	MSA-SW42C-081516	3005A, 6020	D	1 mL					
240-68359-D-24	MSA-SW42D-081516	3005A, 6020	D	1 mL					
240-68359-D-25	MSA-SW43A-081516	3005A, 6020	D	1 mL					
240-68359-D-26	MSA-SW43B-081516	3005A, 6020	D	1 mL					
240-68359-D-27	MSA-SW43C-081516	3005A, 6020	D	1 mL					
240-68359-D-28	MSA-SW43D-081516	3005A, 6020	D	1 mL					
240-68359-D-29	MSA-SW44A-081516	3005A, 6020	D	1 mL					
240-68359-D-30	MSA-SW44B-081516	3005A, 6020	D	1 mL					
240-68359-D-31	MSA-SW44C-081516	3005A, 6020	D	1 mL					
240-68359-D-32	MSA-SW44D-081516	3005A, 6020	D	1 mL					
240-68359-D-33	MSA-SW45A-081516	3005A, 6020	D	1 mL					
240-68359-D-34	MSA-SW45B-081516	3005A, 6020	D	1 mL					
240-68359-D-35	MSA-SW45C-081516	3005A, 6020	D	1 mL					
240-68359-D-36	MSA-SW45D-081516	3005A, 6020	D	1 mL					

Batch Notes	
Filter Paper ID	9699375
Hot Block ID	HB3
Pipette ID	MP3
Digestion Tube/Cup ID	1512329

Basis	Basis Description
D	Dissolved

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242967 Batch Start Date: 08/17/16 14:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 08/17/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00047	MTH2S04 00033	MTHGCALW 01289	MTKMN04W 00112
MB 240-242967/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-242967/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-68359-D-1	MSA-SW37A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-1 MS	MSA-SW37A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-68359-D-1 MSD	MSA-SW37A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-68359-D-2	MSA-SW37B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-3	MSA-SW37C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-4	MSA-SW37D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-5	MSA-SW38A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-6	MSA-SW38B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-7	MSA-SW38C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-8	MSA-SW38D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-9	MSA-SW39A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-10	MSA-SW39B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-11	MSA-SW39C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-12	MSA-SW39D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-13	MSA-SW40A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-14	MSA-SW40B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-15	MSA-SW40C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-16	MSA-SW40D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-17	MSA-SW41A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-18	MSA-SW41B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-19	MSA-SW41C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-20	MSA-SW41D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
MB 240-242967/1		7470A, 7470A		1.25 mL					
LCS 240-242967/2		7470A, 7470A		1.25 mL					

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242967 Batch Start Date: 08/17/16 14:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 08/17/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
240-68359-D-1	MSA-SW37A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-1 MS	MSA-SW37A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-1 MSD	MSA-SW37A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-2	MSA-SW37B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-3	MSA-SW37C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-4	MSA-SW37D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-5	MSA-SW38A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-6	MSA-SW38B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-7	MSA-SW38C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-8	MSA-SW38D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-9	MSA-SW39A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-10	MSA-SW39B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-11	MSA-SW39C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-12	MSA-SW39D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-13	MSA-SW40A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-14	MSA-SW40B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-15	MSA-SW40C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-16	MSA-SW40D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-17	MSA-SW41A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-18	MSA-SW41B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-19	MSA-SW41C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-20	MSA-SW41D-081516	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	Takeout temps within range
Hot Block ID	B1
Pipette ID	MP1-MP2
Digestion Tube/Cup ID	1512329

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242967 Batch Start Date: 08/17/16 14:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 08/17/16 16:00

Basis	Basis Description
D	Dissolved

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242974 Batch Start Date: 08/17/16 14:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 08/17/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00047	MTH2S04 00033	MTHGCALW 01289	MTKMN04W 00112
MB 240-242974/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-242974/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-68359-D-21	MSA-SW42A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-21 MS	MSA-SW42A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-68359-D-21 MSD	MSA-SW42A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-68359-D-22	MSA-SW42B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-23	MSA-SW42C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-24	MSA-SW42D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-25	MSA-SW43A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-26	MSA-SW43B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-27	MSA-SW43C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-28	MSA-SW43D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-29	MSA-SW44A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-30	MSA-SW44B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-31	MSA-SW44C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-32	MSA-SW44D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-33	MSA-SW45A-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-34	MSA-SW45B-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-35	MSA-SW45C-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-68359-D-36	MSA-SW45D-081516	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
MB 240-242974/1		7470A, 7470A		1.25 mL					
LCS 240-242974/2		7470A, 7470A		1.25 mL					
240-68359-D-21	MSA-SW42A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-21 MS	MSA-SW42A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-21 MSD	MSA-SW42A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-22	MSA-SW42B-081516	7470A, 7470A	D	1.25 mL					

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 242974 Batch Start Date: 08/17/16 14:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 08/17/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00094					
240-68359-D-23	MSA-SW42C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-24	MSA-SW42D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-25	MSA-SW43A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-26	MSA-SW43B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-27	MSA-SW43C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-28	MSA-SW43D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-29	MSA-SW44A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-30	MSA-SW44B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-31	MSA-SW44C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-32	MSA-SW44D-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-33	MSA-SW45A-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-34	MSA-SW45B-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-35	MSA-SW45C-081516	7470A, 7470A	D	1.25 mL					
240-68359-D-36	MSA-SW45D-081516	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	Takeout temps within range
Hot Block ID	C1
Pipette ID	MP1-MP2
Digestion Tube/Cup ID	1512329

Basis	Basis Description
D	Dissolved

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-68359-1

SDG No.:

Batch Number: 243161 Batch Start Date: 08/17/16 09:04 Batch Analyst: Heakin, David

Batch Method: 7470A Batch End Date: 08/17/16 11:04

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00047	MTH2S04 00033	MTHGCALW 01289	MTHgICV_00001 00053
ICV 240-243161/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-243161/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-243161/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-243161/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-243161/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00112	MTTMHNO3 00094				
ICV 240-243161/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-243161/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-243161/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-243161/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-243161/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	Takeout temp in range
Hot Block ID	C2
Pipette ID	A6, MP1, MP2

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.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **OCTOBER 4, 2016**

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

SUBJECT: **INORGANIC DATA VALIDATION – HEXAVALENT CHROMIUM**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
FROG MORTAR CREEK
SAMPLE DELIVERY GROUP (SDG) TMM-072

SAMPLES: 36/Aqueous/Hexavalent Chromium

MSA-SW37A-081516	MSA-SW37B-081516	MSA-SW37C-081516
MSA-SW37D-081516	MSA-SW38A-081516	MSA-SW38B-081516
MSA-SW38C-081516	MSA-SW38D-081516	MSA-SW39A-081516
MSA-SW39B-081516	MSA-SW39C-081516	MSA-SW39D-081516
MSA-SW40A-081516	MSA-SW40B-081516	MSA-SW40C-081516
MSA-SW40D-081516	MSA-SW41A-081516	MSA-SW41B-081516
MSA-SW41C-081516	MSA-SW41D-081516	MSA-SW42A-081516
MSA-SW42B-081516	MSA-SW42C-081516	MSA-SW42D-081516
MSA-SW43A-081516	MSA-SW43B-081516	MSA-SW43C-081516
MSA-SW43D-081516	MSA-SW44A-081516	MSA-SW44B-081516
MSA-SW44C-081516	MSA-SW44D-081516	MSA-SW45A-081516
MSA-SW45B-081516	MSA-SW45C-081516	MSA-SW45D-081516

Overview

The sample set for LMC – MSA Frog Mortar Creek, SDG TMM-072 consisted of thirty-six (36) aqueous environmental samples. All thirty-six (36) aqueous samples were analyzed for hexavalent chromium. No field duplicate pair was included in the sample delivery group (SDG).

The samples were collected by Tetra Tech, Inc. on August 15, 2016 and analyzed by ALS Environmental. All analyses were conducted in accordance with EPA Method 218.6 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 results, laboratory control sample results, matrix spike/matrix spike duplicate results, chromatographic resolution, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

No major issues were identified.

Minor

No minor issues were identified.

Notes

All samples were properly preserved to a pH of 9.0 – 9.5 and analyzed within 24 hours of sample receipt.

The non-detected results were reported to the Method Detection Limit (MDL).

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review" (August 2014). The text of this report has been formulated to address only those areas affecting data quality.

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

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-081516			MSA-SW37B-081516			MSA-SW37C-081516			MSA-SW37D-081516		
SDG: TMM-072	LAB_ID	2167396001			2167396002			2167396003			2167396004		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-081516			MSA-SW38B-081516			MSA-SW38C-081516			MSA-SW38D-081516		
SDG: TMM-072	LAB_ID	2167396005			2167396006			2167396007			2167396008		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-081516			MSA-SW39B-081516			MSA-SW39C-081516			MSA-SW39D-081516		
SDG: TMM-072	LAB_ID	2167396009			2167396010			2167396011			2167396012		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-081516			MSA-SW40B-081516			MSA-SW40C-081516			MSA-SW40D-081516		
SDG: TMM-072	LAB_ID	2167396013			2167396014			2167396015			2167396016		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-081516			MSA-SW41B-081516			MSA-SW41C-081516			MSA-SW41D-081516		
SDG: TMM-072	LAB_ID	2167396017			2167396018			2167396019			2167396020		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-081516			MSA-SW42B-081516			MSA-SW42C-081516			MSA-SW42D-081516		
SDG: TMM-072	LAB_ID	2167396021			2167396022			2167396023			2167396024		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-081516			MSA-SW43B-081516			MSA-SW43C-081516			MSA-SW43D-081516		
SDG: TMM-072	LAB_ID	2167396025			2167396026			2167396027			2167396028		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-081516			MSA-SW44B-081516			MSA-SW44C-081516			MSA-SW44D-081516		
SDG: TMM-072	LAB_ID	2167396029			2167396030			2167396031			2167396032		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-081516			MSA-SW45B-081516			MSA-SW45C-081516			MSA-SW45D-081516		
SDG: TMM-072	LAB_ID	2167396033			2167396034			2167396035			2167396036		
FRACTION: MISC	SAMP_DATE	8/15/2016			8/15/2016			8/15/2016			8/15/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.052	U		0.052	U		0.052	U		0.052	U	

Appendix B

Results as Reported by the Laboratory

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396001** Date Collected: 8/15/2016 13:03 Matrix: Water

Sample ID: **MSA-SW37A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 01:30	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396002** Date Collected: 8/15/2016 13:07 Matrix: Water

Sample ID: **MSA-SW37B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 01:53	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396003** Date Collected: 8/15/2016 13:11 Matrix: Water

Sample ID: **MSA-SW37C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:01	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396004** Date Collected: 8/15/2016 13:21 Matrix: Water

Sample ID: **MSA-SW37D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:09	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396005** Date Collected: 8/15/2016 11:31 Matrix: Water

Sample ID: **MSA-SW38A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:16	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396006** Date Collected: 8/15/2016 11:40 Matrix: Water

Sample ID: **MSA-SW38B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared	By	Analyzed	By	Cntr
WET CHEMISTRY											
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6			8/16/16 02:24	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396007** Date Collected: 8/15/2016 11:48 Matrix: Water

Sample ID: **MSA-SW38C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:32	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396008** Date Collected: 8/15/2016 11:53 Matrix: Water

Sample ID: **MSA-SW38D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:40	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396009** Date Collected: 8/15/2016 09:24 Matrix: Water

Sample ID: **MSA-SW39A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:48	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396010** Date Collected: 8/15/2016 09:30 Matrix: Water

Sample ID: **MSA-SW39B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 02:55	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396011** Date Collected: 8/15/2016 09:35 Matrix: Water

Sample ID: **MSA-SW39C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 03:27	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396012** Date Collected: 8/15/2016 09:43 Matrix: Water

Sample ID: **MSA-SW39D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 03:50	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396013** Date Collected: 8/15/2016 12:09 Matrix: Water

Sample ID: **MSA-SW40A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 03:58	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396014** Date Collected: 8/15/2016 12:15 Matrix: Water

Sample ID: **MSA-SW40B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:06	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396015** Date Collected: 8/15/2016 12:18 Matrix: Water

Sample ID: **MSA-SW40C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:13	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396016** Date Collected: 8/15/2016 12:23 Matrix: Water

Sample ID: **MSA-SW40D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:21	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396017** Date Collected: 8/15/2016 11:04 Matrix: Water

Sample ID: **MSA-SW41A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:29	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396018** Date Collected: 8/15/2016 11:08 Matrix: Water

Sample ID: **MSA-SW41B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:37	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396019** Date Collected: 8/15/2016 11:11 Matrix: Water

Sample ID: **MSA-SW41C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:45	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396020** Date Collected: 8/15/2016 11:15 Matrix: Water

Sample ID: **MSA-SW41D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 04:52	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396021** Date Collected: 8/15/2016 12:40 Matrix: Water

Sample ID: **MSA-SW42A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 05:39	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396022** Date Collected: 8/15/2016 12:44 Matrix: Water

Sample ID: **MSA-SW42B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:02	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396023** Date Collected: 8/15/2016 12:50 Matrix: Water

Sample ID: **MSA-SW42C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:10	MBW	A

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ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396024** Date Collected: 8/15/2016 12:53 Matrix: Water

Sample ID: **MSA-SW42D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:18	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396025** Date Collected: 8/15/2016 10:30 Matrix: Water

Sample ID: **MSA-SW43A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:26	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396026** Date Collected: 8/15/2016 10:35 Matrix: Water

Sample ID: **MSA-SW43B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:34	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396027** Date Collected: 8/15/2016 10:41 Matrix: Water

Sample ID: **MSA-SW43C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:41	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

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34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396028** Date Collected: 8/15/2016 10:48 Matrix: Water

Sample ID: **MSA-SW43D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:49	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396029** Date Collected: 8/15/2016 10:10 Matrix: Water

Sample ID: **MSA-SW44A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 06:57	MBW	A

Debra J Musser

Ms. Debra J. Musser
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34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396030** Date Collected: 8/15/2016 10:15 Matrix: Water

Sample ID: **MSA-SW44B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 07:05	MBW	A

Debra J Musser

Ms. Debra J. Musser
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396031** Date Collected: 8/15/2016 10:18 Matrix: Water

Sample ID: **MSA-SW44C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 07:36	MBW	A

Debra J Musser

Ms. Debra J. Musser
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396032** Date Collected: 8/15/2016 10:22 Matrix: Water

Sample ID: **MSA-SW44D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 07:59	MBW	A

Debra J Musser

Ms. Debra J. Musser
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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396033** Date Collected: 8/15/2016 09:49 Matrix: Water

Sample ID: **MSA-SW45A-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	Cntr
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 08:07	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396034** Date Collected: 8/15/2016 09:53 Matrix: Water

Sample ID: **MSA-SW45B-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 08:15	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396035** Date Collected: 8/15/2016 10:00 Matrix: Water

Sample ID: **MSA-SW45C-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 08:23	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2167396 TMM072|112IC07804.09

Lab ID: **2167396036** Date Collected: 8/15/2016 10:03 Matrix: Water

Sample ID: **MSA-SW45D-081516** Date Received: 8/15/2016 21:00

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.052	EPA 218.6		8/16/16 08:31	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

Appendix C

Support Documentation

DJM

Middletown

34 Dogwood Lane
Middletown, PA

Chain of Custody Record

21673965

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Deb Musser	Carrier: Fedex	1 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below 24 HR HOLD 72HR			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC07804.09	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium (218.6)
MSA-SW37A-081516	8/15/2016	1303	SW	Water	1		x
MSA-SW37B-081516	8/15/2016	1307	SW	Water	1		x
MSA-SW37C-081516	8/15/2016	1311	SW	Water	1		x
MSA-SW37D-081516	8/15/2016	1321	SW	Water	1		x
MSA-SW38A-081516	8/15/2016	1131	SW	Water	1		x
MSA-SW38B-081516	8/15/2016	1140	SW	Water	1		x
MSA-SW38C-081516	8/15/2016	1148	SW	Water	1		x
MSA-SW38D-081516	8/15/2016	1153	SW	Water	1		x
MSA-SW39A-081516	8/15/2016	0924	SW	Water	1		x
MSA-SW39B-081516	8/15/2016	0930	SW	Water	1		x
MSA-SW39C-081516	8/15/2016	0935	SW	Water	1		x
MSA-SW39D-081516	8/15/2016	0943	SW	Water	1		x
							1

	Y	N	Initials
Custody Seals Present?			
(if present) Seals Intact?			
Received on Ice?	✓		LMG
COC/Lbls Complete	✓		
Cont in Good Cond?	✓		
Correct Containers?	✓		
Correct Samp Vol?	✓		
Correct Preservation?	✓		
Headspace/Volatiles?			

Cooler Temp: 1 °C
Cooler #:
Therm ID: 382
Ship Carrier: FedEx UPS DHL
Tracking #:

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other

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

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

Special Instructions/QC Requirements & Comments: **Samples must be analyzed within 24 hours of sample time. Filter in Lab**

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	Tetra Tech	8/15/16 1625	Received by:	ACS	8/15/16 1625
Relinquished by:	ACS	8/15/16 1730	Received by:	ACS	1730
Relinquished by:		2100	Received by:		8-16-16 2100

LMG 08/16/16 0136

SB 396

Middletown

34 Dogwood Lane
Middletown, PA

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Deb Musser	Carrier: Fedex	2 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 24 HR HOLD RME			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC07804.09	☐ 1 day			Sampler: Mullis

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium (218.6)	Sample Specific Notes:
MSA-SW40A-081516	8/15/2016	1209	SW	Water	1		x	
MSA-SW40B-081516	8/15/2016	1215	SW	Water	1		x	
MSA-SW40C-081516	8/15/2016	1218	SW	Water	1		x	
MSA-SW40D-081516	8/15/2016	1223	SW	Water	1		x	
MSA-SW41A-081516	8/15/2016	1104	SW	Water	1		x	
MSA-SW41B-081516	8/15/2016	1108	SW	Water	1		x	
MSA-SW41C-081516	8/15/2016	1111	SW	Water	1		x	
MSA-SW41D-081516	8/15/2016	1115	SW	Water	1		x	
MSA-SW42A-081516	8/15/2016	1240	SW	Water	1		x	
MSA-SW42B-081516	8/15/2016	1244	SW	Water	1		x	
MSA-SW42C-081516	8/15/2016	1250	SW	Water	1		x	
MSA-SW42D-081516	8/15/2016	1253	SW	Water	1		x	
							1	

	Y	N	Initials
Custody Seals Present?		✓	LMG
(if present) Seals Intact?	✓		
Received on Ice?	✓		
COC/Lbls Complete	✓		
Cont in Good Cond?	✓		
Correct Containers?	✓		
Correct Samp Vol?	✓		
Correct Preservation?	✓		
Headspace/Volatiles?	✓		

Cooler Temp: 1 °C
Cooler #:
Therm ID: 352
Ship Carrier: FedEx UPS DHL
Tracking #:

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

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

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

Special Instructions/QC Requirements & Comments: **Samples must be analyzed within 24 hours of sample time. Filter in Lab**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/15/16 1625	[signature] / ALS	ALS	8/15/16 1625
[signature]	ALS	8/15 1730	[signature]		8-15 1730
[signature]		2100	[signature]		8-15-16 2100

LMG 08/16/16 0136

DSM

3916

Middletown

34 Dogwood Lane
Middletown, PA

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Deb Musser	Carrier: Fedex	3 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below 24 HR HOLD Time			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC07804.09	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium (218.
MSA-SW43A-081516	8/15/2016	1030	SW	Water	1		x
MSA-SW43B-081516	8/15/2016	1035	SW	Water	1		x
MSA-SW43C-081516	8/15/2016	1041	SW	Water	1		x
MSA-SW43D-081516	8/15/2016	1048	SW	Water	1		x
MSA-SW44A-081516	8/15/2016	1010	SW	Water	1		x
MSA-SW44B-081516	8/15/2016	1015	SW	Water	1		x
MSA-SW44C-081516	8/15/2016	1018	SW	Water	1		x
MSA-SW44D-081516	8/15/2016	1022	SW	Water	1		x
MSA-SW45A-081516	8/15/2016	0949	SW	Water	1		x
MSA-SW45B-081516	8/15/2016	0953	SW	Water	1		x
MSA-SW45C-081516	8/15/2016	1000	SW	Water	1		x
MSA-SW45D-081516	8/15/2016	1003	SW	Water	1		x
							1

	Y	N	Initials	Cooler Temp.
Custody Seals Present?			LMG	°C
(if present) Seals Intact?				Cooler #:
Received on Ice?	✓			
COC/Lbls Complete	✓			Therm ID: 352
Cont in Good Cond?	✓			
Correct Containers?	✓			Ship Carrier:
Correct Samp Vol?	✓			FedEx UPS
Correct Preservation?	✓			DHL
Headspace/Volatiles?				

Tracking #:

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

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

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

Special Instructions/QC Requirements & Comments: Samples must be analyzed within 24 hours of sample time. Filter in Lab

	Company	Date/Time		Company	Date/Time
Relinquished by:	Tetra Tech	8/15/16 1625	Received by:	ALS	8/15/16 1625
Relinquished by:	ALS	8/15 1730	Received by:		1730
Relinquished by:	ALS	2100	Received by:		8-18-16 2100

LMG 08/16/16 0130

Tetra Tech, Inc.

ALS-Middletown
Case Narrative
TMM-072

Sample Management

This report contains the results of the analysis of thirty-six (36) water samples collected on August 15, 2016. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The samples arrived at ALS via courier on August 15, 2016. Upon receipt, the samples were inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. Samples were received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Hexavalent Chromium by EPA Method 218.6

Sample handling. Thirty-six (36) aqueous samples were analyzed for hexavalent chromium by EPA Method 218.6. The samples were filtered, preserved, and analyzed within the 24-hour holding period established by the client for the method.

Calibration. A calibration was properly established. Continuing calibration verification standards were analyzed to verify the calibration. The standards were within the QC limits.

Blanks. Method blanks were analyzed with the samples. Hexavalent chromium was not detected above the reporting limit in the blanks.

Laboratory Control Samples. Laboratory control samples, identified as 2392059, 2392061, 2392069, and 2392071, were analyzed initially and every 20 samples. The recoveries were within the QC limits.

Spikes. Matrix spike and matrix spike duplicate analyses, identified as 2392062 and 2392063, were performed on sample 2167396001 (MSA-SW37A-081516). The spike recoveries and the relative percent difference between the spikes were all within the QC limits.

Matrix spike and matrix spike duplicate analyses, identified as 2392066 and 2392067, were performed on sample 2167396011 (MSA-SW39C-081516). The spike recoveries and the relative percent difference between the spikes were all within the QC limits.

Matrix spike and matrix spike duplicate analyses, identified as 2392072 and 2392073, were performed on sample 2167396021 (MSA-SW42A-081516). The spike recoveries and the relative percent difference between the spikes were all within the QC limits.

Matrix spike and matrix spike duplicate analyses, identified as 2392076 and 2392077, were performed on sample 2167396031 (MSA-SW44C-081516). The spike recoveries and the relative percent difference between the spikes were all within the QC limits.

TETRA TECH ISG
TtNUS. Information Systems Group

Completion Ticket

On 8/17/2016 at 5:34 AM the following files were submitted to Tetra Tech by charles.blair@alsglobal.com with ALSI:

2167396-A1.txt, 2167396-A3.txt

If you need to identify this session at a later date refer to Ticket Key:

2016817_3004722738_ledd_ALSI

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I Jennifer M. Lamoreux, as the designated Quality Assurance Officer, hereby attest that all electronic deliverables have been thoroughly reviewed and are in agreement with the associated hardcopy data. The enclosed electronic files have been reviewed for accuracy (including significant figures), completeness and format. The laboratory will be responsible for any labor time necessary to correct enclosed electronic deliverables that have been found to be in error. I can be reached at (717) 944-5541 if there are any questions or problems with the enclosed electronic deliverables.

Signature:  Title: Reporting Manager Date: 9/11/2016

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2167396 TMM072|112IC07804.09

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2167396001	MSA-SW37A-081516	Water	8/15/2016 13:03	8/15/2016 21:00	Collected by Client
2167396002	MSA-SW37B-081516	Water	8/15/2016 13:07	8/15/2016 21:00	Collected by Client
2167396003	MSA-SW37C-081516	Water	8/15/2016 13:11	8/15/2016 21:00	Collected by Client
2167396004	MSA-SW37D-081516	Water	8/15/2016 13:21	8/15/2016 21:00	Collected by Client
2167396005	MSA-SW38A-081516	Water	8/15/2016 11:31	8/15/2016 21:00	Collected by Client
2167396006	MSA-SW38B-081516	Water	8/15/2016 11:40	8/15/2016 21:00	Collected by Client
2167396007	MSA-SW38C-081516	Water	8/15/2016 11:48	8/15/2016 21:00	Collected by Client
2167396008	MSA-SW38D-081516	Water	8/15/2016 11:53	8/15/2016 21:00	Collected by Client
2167396009	MSA-SW39A-081516	Water	8/15/2016 09:24	8/15/2016 21:00	Collected by Client
2167396010	MSA-SW39B-081516	Water	8/15/2016 09:30	8/15/2016 21:00	Collected by Client
2167396011	MSA-SW39C-081516	Water	8/15/2016 09:35	8/15/2016 21:00	Collected by Client
2167396012	MSA-SW39D-081516	Water	8/15/2016 09:43	8/15/2016 21:00	Collected by Client
2167396013	MSA-SW40A-081516	Water	8/15/2016 12:09	8/15/2016 21:00	Collected by Client
2167396014	MSA-SW40B-081516	Water	8/15/2016 12:15	8/15/2016 21:00	Collected by Client
2167396015	MSA-SW40C-081516	Water	8/15/2016 12:18	8/15/2016 21:00	Collected by Client
2167396016	MSA-SW40D-081516	Water	8/15/2016 12:23	8/15/2016 21:00	Collected by Client
2167396017	MSA-SW41A-081516	Water	8/15/2016 11:04	8/15/2016 21:00	Collected by Client
2167396018	MSA-SW41B-081516	Water	8/15/2016 11:08	8/15/2016 21:00	Collected by Client
2167396019	MSA-SW41C-081516	Water	8/15/2016 11:11	8/15/2016 21:00	Collected by Client
2167396020	MSA-SW41D-081516	Water	8/15/2016 11:15	8/15/2016 21:00	Collected by Client
2167396021	MSA-SW42A-081516	Water	8/15/2016 12:40	8/15/2016 21:00	Collected by Client
2167396022	MSA-SW42B-081516	Water	8/15/2016 12:44	8/15/2016 21:00	Collected by Client
2167396023	MSA-SW42C-081516	Water	8/15/2016 12:50	8/15/2016 21:00	Collected by Client
2167396024	MSA-SW42D-081516	Water	8/15/2016 12:53	8/15/2016 21:00	Collected by Client
2167396025	MSA-SW43A-081516	Water	8/15/2016 10:30	8/15/2016 21:00	Collected by Client
2167396026	MSA-SW43B-081516	Water	8/15/2016 10:35	8/15/2016 21:00	Collected by Client
2167396027	MSA-SW43C-081516	Water	8/15/2016 10:41	8/15/2016 21:00	Collected by Client
2167396028	MSA-SW43D-081516	Water	8/15/2016 10:48	8/15/2016 21:00	Collected by Client
2167396029	MSA-SW44A-081516	Water	8/15/2016 10:10	8/15/2016 21:00	Collected by Client
2167396030	MSA-SW44B-081516	Water	8/15/2016 10:15	8/15/2016 21:00	Collected by Client
2167396031	MSA-SW44C-081516	Water	8/15/2016 10:18	8/15/2016 21:00	Collected by Client
2167396032	MSA-SW44D-081516	Water	8/15/2016 10:22	8/15/2016 21:00	Collected by Client
2167396033	MSA-SW45A-081516	Water	8/15/2016 09:49	8/15/2016 21:00	Collected by Client
2167396034	MSA-SW45B-081516	Water	8/15/2016 09:53	8/15/2016 21:00	Collected by Client

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2167396 TMM072|112IC07804.09

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2167396035	MSA-SW45C-081516	Water	8/15/2016 10:00	8/15/2016 21:00	Collected by Client
2167396036	MSA-SW45D-081516	Water	8/15/2016 10:03	8/15/2016 21:00	Collected by Client

ALS Environmental

34 Dogwood Lane ▪ Middletown, PA 17057 ▪ Phone: 717-944-5541 ▪ Fax: 717-944-1430 ▪ www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01
State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

SAMPLE SUMMARY

Workorder: 2167396 TMM072|112IC07804.09

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incurbator and the "Analyzed" value is the date/time out the incubator.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

Form 4B
Inorganic Blank Summary

Analysis Method: EPA 218.6
Instrument: IC-4

SDG No.: TMM072

Sample ID	Analyte	Type	Matrix	Analyzed	Result	Q (1)	Units
2392058	Hexavalent Chromium	MB	QC-Water	08/16/2016 00:58	0.25	U	ug/L
2392065	Hexavalent Chromium	MB	QC-Water	08/16/2016 03:19	0.25	U	ug/L
2392068	Hexavalent Chromium	MB	QC-Water	08/16/2016 05:08	0.25	U	ug/L
2392075	Hexavalent Chromium	MB	QC-Water	08/16/2016 07:28	0.25	U	ug/L
2392079	Hexavalent Chromium	MB	QC-Water	08/16/2016 08:54	0.25	U	ug/L

(1) The following qualifiers are used:

U: The analyte concentration is less than the reporting limit listed
J: The analyte concentration is less than the reporting limit but greater than the method detection limit

Comments:

Form 8B

Laboratory Control Sample (LCS) Recovery Summary

Analysis Method: EPA 218.6 SDG No.: TMM072

Matrix (soil/water): QC-Water Instrument ID: IC-4

Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2392059	Hexavalent Chromium	MRL	08/16/2016 01:06	0.25	0.25	100		50 - 150
2392061	Hexavalent Chromium	LCS	08/16/2016 01:22	10	10.1	101		90 - 110
2392069	Hexavalent Chromium	MRL	08/16/2016 05:16	0.25	0.25	100		50 - 150
2392071	Hexavalent Chromium	LCS	08/16/2016 05:31	10	10	99.8		90 - 110

(1) The following qualifiers are used:

* : Values outside of acceptable limits

Comments:

Sample Description

MSA-SW42A-081516

Form 3A

Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TMM072
Units: ug/L
Lab Sample ID: 2167396021
Lab MS Sample ID: 2392072
Lab MSD Sample ID: 2392073

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	4.9	98.7		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	5.0	100		90 - 110	1.59		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW44C-081516

Form 3A

Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TMM072
Units: ug/L
Lab Sample ID: 2167396031
Lab MS Sample ID: 2392076
Lab MSD Sample ID: 2392077

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	4.9	97.6		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	4.8	95.4		90 - 110	2.3		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Form 6B

Inorganic Initial and Continuing Calibration Verification Summary

Analysis Method: EPA 218.6 SDG No. TMM072

Instrument ID: IC-4 Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2392060	Hexavalent Chromium	CCVL	08/16/2016 01:14	5	4.7	94.1		90 - 110
2392064	Hexavalent Chromium	CCVH	08/16/2016 03:11	20	20.0	100		90 - 110
2392070	Hexavalent Chromium	CCVL	08/16/2016 05:24	5	4.8	97		90 - 110
2392074	Hexavalent Chromium	CCVH	08/16/2016 07:20	20	20.1	100		90 - 110
2392078	Hexavalent Chromium	CCVL	08/16/2016 08:46	5	5.2	104		90 - 110

(1) The following qualifiers are used:

* : Values outside of acceptable limits

Comments:

Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Final pH 9-9.5, SI units	0.4 µm Filtered
2167396001	Cr+6 Buffer	X	Y
2167396002	Cr+6 Buffer	X	Y
2167396003	Cr+6 Buffer	X	Y
2167396004	Cr+6 Buffer	X	Y
2167396005	Cr+6 Buffer	X	Y
2167396006	Cr+6 Buffer	X	Y
2167396007	Cr+6 Buffer	X	Y
2167396008	Cr+6 Buffer	X	Y
2167396009	Cr+6 Buffer	X	Y
2167396010	Cr+6 Buffer	X	Y
2167396011	Cr+6 Buffer	X	Y
2167396012	Cr+6 Buffer	X	Y
2167396013	Cr+6 Buffer	X	Y
2167396014	Cr+6 Buffer	X	Y
2167396015	Cr+6 Buffer	X	Y
2167396016	Cr+6 Buffer	X	Y
2167396017	Cr+6 Buffer	X	Y
2167396018	Cr+6 Buffer	X	Y
2167396019	Cr+6 Buffer	X	Y
2167396020	Cr+6 Buffer	X	Y
	MBW 8/16/16		

Date:	8.16.2016
Tech:	MBW

Queue:	WETC
Batch:	174590

Reagent:	
Cr+6 Buffer:	WR160816005

Reviewed by:	CTF
Reviewed date:	8/16/16

Comments:
An "X" in the Final pH column indicates that the sample pH is within this range.
Adjusted with "None" indicates sample was received at labortory already within required pH range.

Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Final pH 9-9.5, SI units	0.4 µm Filtered
2167396021	Cr+6 Buffer	X	Y
2167396022	Cr+6 Buffer	X	Y
2167396023	Cr+6 Buffer	X	Y
2167396024	Cr+6 Buffer	X	Y
2167396025	Cr+6 Buffer	X	Y
2167396026	Cr+6 Buffer	X	Y
2167396027	Cr+6 Buffer	X	Y
2167396028	Cr+6 Buffer	X	Y
2167396029	Cr+6 Buffer	X	Y
2167396030	Cr+6 Buffer	X	Y
2167396031	Cr+6 Buffer	X	Y
2167396032	Cr+6 Buffer	X	Y
2167396033	Cr+6 Buffer	X	Y
2167396034	Cr+6 Buffer	X	Y
2167396035	Cr+6 Buffer	X	Y
2167396036	Cr+6 Buffer	X	Y

Date:	8.16.2016
Tech:	MBW

Queue:	WETC
Batch:	174590

Reagent:
Cr+6 Buffer: WR160816005

Reviewed by:	CJF
Reviewed date:	8/16/16

Comments:
An "X" in the Final pH column indicates that the sample pH is within this range.
Adjusted with "None" indicates sample was received at labortory already within required pH range.

Title: 4-081616
Datasource: WETCHEMIC
Location: ICS2100\ICS2100 Sequence\Cr +6\2016\4-1608
Timebase: ICS2100
#Samples: 69
Created: 8/15/2016 11:34:57 PM by almdt.nouser
Last Update: 8/16/2016 2:19:09 AM by almdt.nouser

No.	Pos.	Name	*DilutionFactor	*SampleType	Comment	Program	Method	*Analyst	*Batch
1	1	Cal Std 1	1	CAL		cr+6	218_6_081616	MBW	
2	2	Cal Std 2	1	CAL		cr+6	218_6_081616	MBW	
3	3	Cal Std 3	1	CAL		cr+6	218_6_081616	MBW	
4	4	Cal Std 4	1	CAL		cr+6	218_6_081616	MBW	
5	5	Cal Std 5	1	CAL		cr+6	218_6_081616	MBW	
6	6	Cal Std 6	1	CAL		cr+6	218_6_081616	MBW	
7	7	2392058	1	MB	LRB	cr+6	218_6_081616	MBW	174590
8	8	2392059	1	MRL	MRL	cr+6	218_6_081616	MBW	174590
9	9	2392060	1	CCVL	LFB	cr+6	218_6_081616	MBW	174590
10	10	2392061	1	LCS	QCS	cr+6	218_6_081616	MBW	174590
11	11	2167396001	1	SAMPLE		cr+6	218_6_081616	MBW	174590
12	12	2392062	1	MS		cr+6	218_6_081616	MBW	174590
13	13	2392063	1	MSD		cr+6	218_6_081616	MBW	174590
14	14	2167396002	1	SAMPLE		cr+6	218_6_081616	MBW	174590
15	15	2167396003	1	SAMPLE		cr+6	218_6_081616	MBW	174590
16	16	2167396004	1	SAMPLE		cr+6	218_6_081616	MBW	174590
17	17	2167396005	1	SAMPLE		cr+6	218_6_081616	MBW	174590
18	18	2167396006	1	SAMPLE		cr+6	218_6_081616	MBW	174590
19	19	2167396007	1	SAMPLE		cr+6	218_6_081616	MBW	174590
20	20	2167396008	1	SAMPLE		cr+6	218_6_081616	MBW	174590
21	21	2167396009	1	SAMPLE		cr+6	218_6_081616	MBW	174590
22	22	2167396010	1	SAMPLE		cr+6	218_6_081616	MBW	174590
23	23	2167396010 DUP	1	DUP		cr+6	218_6_081616	MBW	174590
24	24	2392064	1	CCVH		cr+6	218_6_081616	MBW	174590
25	25	2392065	1	MB		cr+6	218_6_081616	MBW	174590
26	26	2167396011	1	SAMPLE		cr+6	218_6_081616	MBW	174590
27	27	2392066	1	MS		cr+6	218_6_081616	MBW	174590
28	28	2392067	1	MSD		cr+6	218_6_081616	MBW	174590
29	29	2167396012	1	SAMPLE		cr+6	218_6_081616	MBW	174590
30	30	2167396013	1	SAMPLE		cr+6	218_6_081616	MBW	174590
31	31	2167396014	1	SAMPLE		cr+6	218_6_081616	MBW	174590
32	32	2167396015	1	SAMPLE		cr+6	218_6_081616	MBW	174590
33	33	2167396016	1	SAMPLE		cr+6	218_6_081616	MBW	174590
34	34	2167396017	1	SAMPLE		cr+6	218_6_081616	MBW	174590
35	35	2167396018	1	SAMPLE		cr+6	218_6_081616	MBW	174590
36	36	2167396019	1	SAMPLE		cr+6	218_6_081616	MBW	174590
37	37	2167396020	1	SAMPLE		cr+6	218_6_081616	MBW	174590
38	38	2167396020 DUP	1	DUP		cr+6	218_6_081616	MBW	174590
39	39	2392068	1	MB	BLANK	cr+6	218_6_081616	MBW	174591
40	40	2392069	1	MRL	MRL	cr+6	218_6_081616	MBW	174591
41	41	2392070	1	CCVL	LFB	cr+6	218_6_081616	MBW	174591

Title: 4-081616
Datasource: WETCHEMIC
Location: ICS2100\ICS2100 Sequence\Cr +6\2016\4-1608
Timebase: ICS2100
#Samples: 69
Created: 8/15/2016 11:34:57 PM by almdt.nouser
Last Update: 8/16/2016 2:19:09 AM by almdt.nouser

No.	Pos.	Name	*DilutionFactor	*SampleType	Comment	Program	Method	*Analyst	*Batch
42	42	2392071	1	LCS	QCS	cr+6	218_6_081616	MBW	174591
43	43	2167396021	1	SAMPLE		cr+6	218_6_081616	MBW	174591
44	44	2392072	1	MS		cr+6	218_6_081616	MBW	174591
45	45	2392073	1	MSD		cr+6	218_6_081616	MBW	174591
46	46	2167396022	1	SAMPLE		cr+6	218_6_081616	MBW	174591
▶	47	2167396023	1	SAMPLE		cr+6	218_6_081616	MBW	174591
48	48	2167396024	1	SAMPLE		cr+6	218_6_081616	MBW	174591
49	49	2167396025	1	SAMPLE		cr+6	218_6_081616	MBW	174591
50	50	2167396026	1	SAMPLE		cr+6	218_6_081616	MBW	174591
51	1	2167396027	1	SAMPLE		cr+6	218_6_081616	MBW	174591
52	2	2167396028	1	SAMPLE		cr+6	218_6_081616	MBW	174591
53	3	2167396029	1	SAMPLE		cr+6	218_6_081616	MBW	174591
54	4	2167396030	1	SAMPLE		cr+6	218_6_081616	MBW	174591
55	5	2167396030 DUP	1	DUP		cr+6	218_6_081616	MBW	174591
56	6	2392074	1	CCVH		cr+6	218_6_081616	MBW	174591
57	7	2392075	1	MB		cr+6	218_6_081616	MBW	174591
58	8	2167396031	1	SAMPLE		cr+6	218_6_081616	MBW	174591
59	9	2392076	1	MS		cr+6	218_6_081616	MBW	174591
60	10	2392077	1	MSD		cr+6	218_6_081616	MBW	174591
61	11	2167396032	1	SAMPLE		cr+6	218_6_081616	MBW	174591
62	12	2167396033	1	SAMPLE		cr+6	218_6_081616	MBW	174591
63	13	2167396034	1	SAMPLE		cr+6	218_6_081616	MBW	174591
64	14	2167396035	1	SAMPLE		cr+6	218_6_081616	MBW	174591
65	15	2167396036	1	SAMPLE		cr+6	218_6_081616	MBW	174591
66	16	2167396036 DUP	1	DUP		cr+6	218_6_081616	MBW	174591
67	17	2392078	1	CCVL		cr+6	218_6_081616	MBW	174591
68	18	2392079	1	MB		cr+6	218_6_081616	MBW	174591
69	19	SHUTDOWN		MISC		shutdownCR6	218_6_081616	MBW	174591

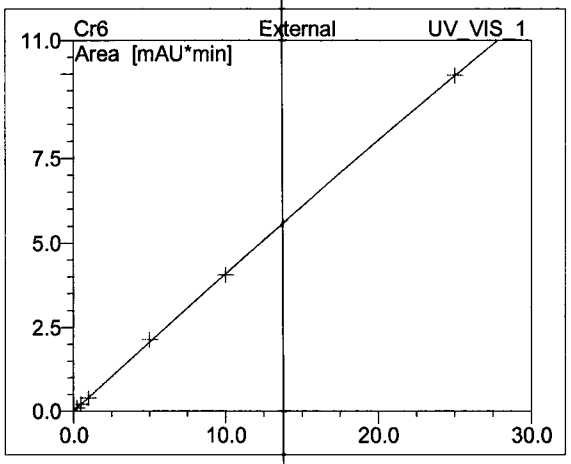
ANION SUMMARY REPORT

No.	Name	Time	*Analyst	lutionFac	*Batch	*Instrument	Amount Cr6 UV_VIS_1
7	2392058	08/16/16 00:58	MBW	1	174590	IC-4	n.a.
8	2392059	08/16/16 01:06	MBW	1	174590	IC-4	0.251
9	2392060	08/16/16 01:14	MBW	1	174590	IC-4	4.703
10	2392061	08/16/16 01:22	MBW	1	174590	IC-4	10.111
11	2167396001	08/16/16 01:30	MBW	1	174590	IC-4	n.a.
12	2392062	08/16/16 01:37	MBW	1	174590	IC-4	4.801
13	2392063	08/16/16 01:45	MBW	1	174590	IC-4	4.876
14	2167396002	08/16/16 01:53	MBW	1	174590	IC-4	n.a.
15	2167396003	08/16/16 02:01	MBW	1	174590	IC-4	n.a.
16	2167396004	08/16/16 02:09	MBW	1	174590	IC-4	n.a.
17	2167396005	08/16/16 02:16	MBW	1	174590	IC-4	n.a.
18	2167396006	08/16/16 02:24	MBW	1	174590	IC-4	n.a.
19	2167396007	08/16/16 02:32	MBW	1	174590	IC-4	n.a.
20	2167396008	08/16/16 02:40	MBW	1	174590	IC-4	n.a.
21	2167396009	08/16/16 02:48	MBW	1	174590	IC-4	n.a.
22	2167396010	08/16/16 02:55	MBW	1	174590	IC-4	n.a.
23	2167396010 DU	08/16/16 03:03	MBW	1	174590	IC-4	n.a.
24	2392064	08/16/16 03:11	MBW	1	174590	IC-4	19.996
25	2392065	08/16/16 03:19	MBW	1	174590	IC-4	n.a.
26	2167396011	08/16/16 03:27	MBW	1	174590	IC-4	n.a.
27	2392066	08/16/16 03:34	MBW	1	174590	IC-4	4.663
28	2392067	08/16/16 03:42	MBW	1	174590	IC-4	4.647
29	2167396012	08/16/16 03:50	MBW	1	174590	IC-4	n.a.
30	2167396013	08/16/16 03:58	MBW	1	174590	IC-4	n.a.
31	2167396014	08/16/16 04:06	MBW	1	174590	IC-4	n.a.
32	2167396015	08/16/16 04:13	MBW	1	174590	IC-4	n.a.
33	2167396016	08/16/16 04:21	MBW	1	174590	IC-4	n.a.
34	2167396017	08/16/16 04:29	MBW	1	174590	IC-4	n.a.
35	2167396018	08/16/16 04:37	MBW	1	174590	IC-4	n.a.
36	2167396019	08/16/16 04:45	MBW	1	174590	IC-4	n.a.
37	2167396020	08/16/16 04:52	MBW	1	174590	IC-4	n.a.
38	2167396020 DU	08/16/16 05:00	MBW	1	174590	IC-4	n.a.
39	2392068	08/16/16 05:08	MBW	1	174591	IC-4	n.a.
40	2392069	08/16/16 05:16	MBW	1	174591	IC-4	0.251
41	2392070	08/16/16 05:24	MBW	1	174591	IC-4	4.849
42	2392071	08/16/16 05:31	MBW	1	174591	IC-4	9.975
43	2167396021	08/16/16 05:39	MBW	1	174591	IC-4	n.a.
44	2392072	08/16/16 05:47	MBW	1	174591	IC-4	4.933
45	2392073	08/16/16 05:55	MBW	1	174591	IC-4	5.012
46	2167396022	08/16/16 06:02	MBW	1	174591	IC-4	n.a.
47	2167396023	08/16/16 06:10	MBW	1	174591	IC-4	n.a.
48	2167396024	08/16/16 06:18	MBW	1	174591	IC-4	n.a.

49	2167396025	08/16/16 06:26	MBW	1	174591	IC-4	n.a.
50	2167396026	08/16/16 06:34	MBW	1	174591	IC-4	n.a.
51	2167396027	08/16/16 06:41	MBW	1	174591	IC-4	n.a.
52	2167396028	08/16/16 06:49	MBW	1	174591	IC-4	n.a.
53	2167396029	08/16/16 06:57	MBW	1	174591	IC-4	n.a.
54	2167396030	08/16/16 07:05	MBW	1	174591	IC-4	n.a.
55	2167396030 DU	08/16/16 07:13	MBW	1	174591	IC-4	n.a.
56	2392074	08/16/16 07:20	MBW	1	174591	IC-4	20.077
57	2392075	08/16/16 07:28	MBW	1	174591	IC-4	n.a.
58	2167396031	08/16/16 07:36	MBW	1	174591	IC-4	n.a.
59	2392076	08/16/16 07:44	MBW	1	174591	IC-4	4.882
60	2392077	08/16/16 07:52	MBW	1	174591	IC-4	4.771
61	2167396032	08/16/16 07:59	MBW	1	174591	IC-4	n.a.
62	2167396033	08/16/16 08:07	MBW	1	174591	IC-4	n.a.
63	2167396034	08/16/16 08:15	MBW	1	174591	IC-4	n.a.
64	2167396035	08/16/16 08:23	MBW	1	174591	IC-4	n.a.
65	2167396036	08/16/16 08:31	MBW	1	174591	IC-4	n.a.
66	2167396036 DU	08/16/16 08:38	MBW	1	174591	IC-4	n.a.
67	2392078	08/16/16 08:46	MBW	1	174591	IC-4	5.180
68	2392079	08/16/16 08:54	MBW	1	174591	IC-4	n.a.
69	SHUTDOWN	08/16/16 09:02	MBW		174591	IC-4	n.a.

Calibration Batch Report

Sequence:	4-081616	Instrument:	IC-4
Instrument Method:	cr+6	InitialCal:	081616
Ini. Date/Time:	08/16/16 01:06	Method:	218_6_081616



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
1	3.93	Cr6	0QOff	6	-0.005	0.419	-0.001	99.9911
AVERAGE:					-0.0045	0.4187	-0.0008	99.9911

APPENDIX C—CHEMICAL-RESULTS DATA TABLE

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-081516 20160815	EL-SW01B EL-SW01B-081516 20160815	EL-SW01C EL-SW01C-081516 20160815	EL-SW01D EL-SW01D-081516 20160815	MSA-SW37A MSA-SW37A-081516 20160815	MSA-SW37B MSA-SW37B-081516 20160815
Volatile organic compounds (µg/L)						
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 UJ	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	NA	NA	NA	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 UJ	0.37 UJ	0.37 UJ	0.37 U	0.37 U	0.37 U
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	1.5 U	2.2 U	2.4 U	0.94 U	2.2 U	1.4 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 UJ	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 UJ	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	NA	NA	NA	NA	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-081516 20160815	EL-SW01B EL-SW01B-081516 20160815	EL-SW01C EL-SW01C-081516 20160815	EL-SW01D EL-SW01D-081516 20160815	MSA-SW37A MSA-SW37A-081516 20160815	MSA-SW37B MSA-SW37B-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 UJ	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	0.26 U	0.26 U	0.26 U	0.26 J	0.26 U	0.26 U
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 UJ
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 UJ	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 UJ	4.9 UJ	4.9 UJ	4.9 U	4.9 U	4.9 U
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.25 J	0.32 J	0.26 J	0.33 J	0.24 J	0.3 J
TRICHLOROFLUOROMETHANE	0.49 U	0.49 U	0.49 U	0.49 UJ	0.49 UJ	0.49 UJ
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	0.29 UJ
Tentatively identified compounds-volatile organic compounds (µg/L)						
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)						
1,4-DIOXANE	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-081516 20160815	EL-SW01B EL-SW01B-081516 20160815	EL-SW01C EL-SW01C-081516 20160815	EL-SW01D EL-SW01D-081516 20160815	MSA-SW37A MSA-SW37A-081516 20160815	MSA-SW37B MSA-SW37B-081516 20160815
Dissolved metals (µg/L)						
ANTIMONY	NA	NA	NA	NA	2.8 U	2.4 U
ARSENIC	NA	NA	NA	NA	2.9 J	2.3 J
BARIUM	NA	NA	NA	NA	34	37
BERYLLIUM	NA	NA	NA	NA	2 U	2 U
CADMIUM	NA	NA	NA	NA	1.6 U	1.6 U
CHROMIUM	NA	NA	NA	NA	1.3 U	1.3 U
COBALT	NA	NA	NA	NA	0.88 J	0.65 U
COPPER	NA	NA	NA	NA	5.3 J	4.8 J
LEAD	NA	NA	NA	NA	0.8 U	0.8 U
MERCURY	NA	NA	NA	NA	0.09 U	0.09 U
MOLYBDENUM	NA	NA	NA	NA	5 U	3.8 U
NICKEL	NA	NA	NA	NA	2.3 J	1.9 J
SELENIUM	NA	NA	NA	NA	2.4 U	2.4 U
SILVER	NA	NA	NA	NA	0.15 U	0.15 U
THALLIUM	NA	NA	NA	NA	1.4 U	1.4 U
TUNGSTEN	NA	NA	NA	NA	6.2 U	4.5 U
VANADIUM	NA	NA	NA	NA	2.7 U	2.7 U
ZINC	NA	NA	NA	NA	31 U	31 U
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	0.052 U	0.052 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS $CaCO_3$	NA	NA	NA	NA	130	140
HARDNESS AS $CaCO_3$	NA	NA	NA	NA	760	790
MAGNESIUM HARDNESS AS $CaCO_3$	NA	NA	NA	NA	630	660

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW37C MSA-SW37C-081516 20160815	MSA-SW37D MSA-SW37D-081516 20160815	MSA-SW38A MSA-SW38A-081516 20160815	MSA-SW38B MSA-SW38B-081516 20160815	MSA-SW38C MSA-SW38C-081516 20160815	MSA-SW38D MSA-SW38D-081516 20160815
Volatile organic compounds (µg/L)						
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.33 J	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	2.7 U	1.3 U	0.94 U	1.1 U	1.7 U	1.1 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.69 J	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW37C MSA-SW37C-081516 20160815	MSA-SW37D MSA-SW37D-081516 20160815	MSA-SW38A MSA-SW38A-081516 20160815	MSA-SW38B MSA-SW38B-081516 20160815	MSA-SW38C MSA-SW38C-081516 20160815	MSA-SW38D MSA-SW38D-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	0.26 U	0.26 U	10	7.4	0.99 J	0.51 J
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.25 J	0.25 J	6.3	5.5	1.3	0.72 J
TRICHLOROFLUOROMETHANE	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	0.29 UJ	0.29 UJ	7.8	4.4	0.43 J	0.29 UJ
Tentatively identified compounds-volatile organic compounds (µg/L)						
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	1.7 NJ	NA	NA	NA
Semivolatile organic compounds (µg/L)						
1,4-DIOXANE	NA	NA	0.47 U	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW37C MSA-SW37C-081516 20160815	MSA-SW37D MSA-SW37D-081516 20160815	MSA-SW38A MSA-SW38A-081516 20160815	MSA-SW38B MSA-SW38B-081516 20160815	MSA-SW38C MSA-SW38C-081516 20160815	MSA-SW38D MSA-SW38D-081516 20160815
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	2 J	2 J	2.4 J	2.4 J	2.1 J	2 J
BARIUM	30	39	37	36	35	38
BERYLLIUM	2 U	2.2 U	2 U	2 U	2 U	2 U
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
CHROMIUM	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	5.8 J	7.5 J	3 J	5.1 J	6.8 J	6.5 J
LEAD	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
MERCURY	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
MOLYBDENUM	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
NICKEL	1.9 J	1.9 J	2.3 J	1.4 J	1.4 J	1.9 J
SELENIUM	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
SILVER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
ZINC	31 U	31 U	31 U	31 U	31 U	31 U
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS $CaCO_3$	110	130	140	140	150	140
HARDNESS AS $CaCO_3$	570	780	810	820	860	790
MAGNESIUM HARDNESS AS $CaCO_3$	460	640	670	680	720	660

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW39A MSA-SW39A-081516 20160815	MSA-SW39B MSA-SW39B-081516 20160815	MSA-SW39C MSA-SW39C-081516 20160815	MSA-SW39D MSA-SW39D-081516 20160815	MSA-SW40A MSA-SW40A-081516 20160815	MSA-SW40B MSA-SW40B-081516 20160815
Volatile organic compounds (µg/L)						
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	1.4 U	1 U	0.94 U	0.98 U	2 U	1.7 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW39A MSA-SW39A-081516 20160815	MSA-SW39B MSA-SW39B-081516 20160815	MSA-SW39C MSA-SW39C-081516 20160815	MSA-SW39D MSA-SW39D-081516 20160815	MSA-SW40A MSA-SW40A-081516 20160815	MSA-SW40B MSA-SW40B-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	0.35 J	0.26 J	0.26 J	0.26 U	3.1	2.2
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.24 J	0.23 J	0.23 J	0.22 U	3.9	4.3
TRICHLOROFLUOROMETHANE	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	0.29 UJ	0.29 UJ	0.29 UJ	0.29 UJ	1.5	0.97
Tentatively identified compounds-volatile organic compounds (µg/L)						
1-HEXANOL, 2-ETHYL-	1.3 NJ	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	1.1 NJ	NA
Semivolatile organic compounds (µg/L)						
1,4-DIOXANE	NA	NA	NA	NA	0.48 U	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW39A MSA-SW39A-081516 20160815	MSA-SW39B MSA-SW39B-081516 20160815	MSA-SW39C MSA-SW39C-081516 20160815	MSA-SW39D MSA-SW39D-081516 20160815	MSA-SW40A MSA-SW40A-081516 20160815	MSA-SW40B MSA-SW40B-081516 20160815
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	2.1 J	2.2 J	2.1 J	2.1 J	2.6 J	2.3 J
BARIUM	39	42	45	42	34	37
BERYLLIUM	2 U	2 U	2 U	2 U	2 U	2 U
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
CHROMIUM	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	3.1 J	3.3 J	4.2 J	51	4 J	5.7 J
LEAD	0.8 U	0.8 U	0.8 U	20	0.8 U	0.8 U
MERCURY	0.09 U	0.14 J	0.17 J	0.1 J	0.09 U	0.09 U
MOLYBDENUM	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
NICKEL	2.4 J	2.7 J	2.3 J	2.3 J	2.4 J	1.8 J
SELENIUM	2.4 U	2.4 U	2.4 U	2.9 J	2.4 U	2.4 U
SILVER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
ZINC	31 U	31 U	31 U	36 J	31 U	31 U
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS $CaCO_3$	150	150	150	150	140	140
HARDNESS AS $CaCO_3$	840	870	920	900	790	810
MAGNESIUM HARDNESS AS $CaCO_3$	700	720	760	750	650	670

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW40C MSA-SW40C-081516 20160815	MSA-SW40D MSA-SW40D-081516 20160815	MSA-SW41A MSA-SW41A-081516 20160815	MSA-SW41B MSA-SW41B-081516 20160815	MSA-SW41C MSA-SW41C-081516 20160815	MSA-SW41D MSA-SW41D-081516 20160815
Volatile organic compounds (µg/L)						
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.33 J	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	1.8 U	0.94 U	1 U	0.97 U	1.3 U	1.1 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW40C MSA-SW40C-081516 20160815	MSA-SW40D MSA-SW40D-081516 20160815	MSA-SW41A MSA-SW41A-081516 20160815	MSA-SW41B MSA-SW41B-081516 20160815	MSA-SW41C MSA-SW41C-081516 20160815	MSA-SW41D MSA-SW41D-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	0.42 J	0.26 U	12	11	0.44 J	0.34 J
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.32 J	0.28 J	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.72 J	0.37 J	6.9	6.1	0.54 J	0.47 J
TRICHLOROFLUOROMETHANE	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	0.29 UJ	0.29 UJ	6.8	5.3	0.29 UJ	0.29 UJ
Tentatively identified compounds-volatile organic compounds (µg/L)						
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)						
1,4-DIOXANE	NA	NA	0.47 U	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW40C MSA-SW40C-081516 20160815	MSA-SW40D MSA-SW40D-081516 20160815	MSA-SW41A MSA-SW41A-081516 20160815	MSA-SW41B MSA-SW41B-081516 20160815	MSA-SW41C MSA-SW41C-081516 20160815	MSA-SW41D MSA-SW41D-081516 20160815
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	1.9 J	2.2 J	2.2 J	2.2 J	2 J	2.3 J
BARIUM	36	41	41	39	40	40
BERYLLIUM	2 U	2 U	2 U	2 U	2 U	2 U
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
CHROMIUM	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	5.9 J	7.9 J	4.3 J	5.4 J	7 J	7.3 J
LEAD	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
MERCURY	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
MOLYBDENUM	2.7 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
NICKEL	1.5 J	1.8 J	2.7 J	1.7 J	1.9 J	2.4 J
SELENIUM	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
SILVER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
ZINC	31 U	31 U	33 J	31 U	31 U	31 U
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS $CaCO_3$	130	140	150	140	140	150
HARDNESS AS $CaCO_3$	760	800	860	850	830	850
MAGNESIUM HARDNESS AS $CaCO_3$	630	670	720	710	690	700

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW42A MSA-SW42A-081516 20160815	MSA-SW42B MSA-SW42B-081516 20160815	MSA-SW42C MSA-SW42C-081516 20160815	MSA-SW42D MSA-SW42D-081516 20160815	MSA-SW43A MSA-SW43A-081516 20160815	MSA-SW43B MSA-SW43B-081516 20160815
Volatile organic compounds (µg/L)						
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	2.1 U	2.1 U	1.3 U	2.1 U	1.3 U	1.5 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW42A MSA-SW42A-081516 20160815	MSA-SW42B MSA-SW42B-081516 20160815	MSA-SW42C MSA-SW42C-081516 20160815	MSA-SW42D MSA-SW42D-081516 20160815	MSA-SW43A MSA-SW43A-081516 20160815	MSA-SW43B MSA-SW43B-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	2.5	3	1.4	0.26 U	4.6	3.5
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.34 J	0.4 J	0.41 J	0.28 J	2.5	2
TRICHLOROFLUOROMETHANE	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	4.3	5.4	2	0.29 U	0.7	0.58
Tentatively identified compounds-volatile organic compounds (µg/L)						
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)						
1,4-DIOXANE	0.48 U	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW42A MSA-SW42A-081516 20160815	MSA-SW42B MSA-SW42B-081516 20160815	MSA-SW42C MSA-SW42C-081516 20160815	MSA-SW42D MSA-SW42D-081516 20160815	MSA-SW43A MSA-SW43A-081516 20160815	MSA-SW43B MSA-SW43B-081516 20160815
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.7 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	2 J	2.5 J	2.2 J	1.8 J	1.8 J	1.8 J
BARIUM	37	41	39	38	38	31
BERYLLIUM	2 U	2 U	2 U	2 U	2 U	2 U
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
CHROMIUM	1.3 U	2 U	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.71 U	0.65 U	0.65 U	0.9 U	0.65 U
COPPER	4.7 J	9.2 J	5.8 J	6.1 J	4.2 J	3.6 J
LEAD	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
MERCURY	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
MOLYBDENUM	2.6 U	3.3 U	2.6 U	2.6 U	2.6 U	2.6 U
NICKEL	2.1 J	2.2 J	2.2 J	2 J	2.7 J	1.7 J
SELENIUM	2.4 U	3.8 U	4 U	2.4 U	2.4 U	2.4 U
SILVER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
ZINC	31 U	31 U	31 U	31 U	31 U	31 U
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS $CaCO_3$	130	140	140	130	140	120
HARDNESS AS $CaCO_3$	750	780	780	760	800	740
MAGNESIUM HARDNESS AS $CaCO_3$	610	640	640	630	670	620

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW43C MSA-SW43C-081516 20160815	MSA-SW43D MSA-SW43D-081516 20160815	MSA-SW44A MSA-SW44A-081516 20160815	MSA-SW44B MSA-SW44B-081516 20160815	MSA-SW44C MSA-SW44C-081516 20160815	MSA-SW44D MSA-SW44D-081516 20160815
Volatile organic compounds (µg/L)						
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	1.4 U	1.5 U	1.2 U	1.3 U	1.6 U	1.2 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW43C MSA-SW43C-081516 20160815	MSA-SW43D MSA-SW43D-081516 20160815	MSA-SW44A MSA-SW44A-081516 20160815	MSA-SW44B MSA-SW44B-081516 20160815	MSA-SW44C MSA-SW44C-081516 20160815	MSA-SW44D MSA-SW44D-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	1.4	0.39 J	1.5	0.46 J	0.44 J	0.45 J
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.37 J	0.24 U	0.64 J	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U	0.32 J	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.59 J	0.23 U	1.1	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U	0.96 J	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.9 J	0.53 J	1	0.5 J	0.41 J	0.49 J
TRICHLOROFLUOROMETHANE	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	0.38 J	0.29 U	0.38 J	0.29 U	0.29 U	0.29 U
Tentatively identified compounds-volatile organic compounds (µg/L)						
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)						
1,4-DIOXANE	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW43C MSA-SW43C-081516 20160815	MSA-SW43D MSA-SW43D-081516 20160815	MSA-SW44A MSA-SW44A-081516 20160815	MSA-SW44B MSA-SW44B-081516 20160815	MSA-SW44C MSA-SW44C-081516 20160815	MSA-SW44D MSA-SW44D-081516 20160815
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	1.8 J	1.8 U	1.8 J	2 J	1.9 J	1.9 J
BARIUM	41	40	43	45	42	42
BERYLLIUM	2 U	2 U	2 U	2 U	2 U	2 U
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
CHROMIUM	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	5.4 J	6.3 J	4.1 J	6.1 J	6.3 J	6.9 J
LEAD	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
MERCURY	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
MOLYBDENUM	2.6 U	6.7 U	4.6 U	3.5 U	3 U	2.7 U
NICKEL	1.9 J	2 J	2.7 J	2.2 J	2.4 J	2.1 J
SELENIUM	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
SILVER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
ZINC	31 U	31 U	31 U	31 U	31 U	31 U
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS $CaCO_3$	150	140	140	150	140	150
HARDNESS AS $CaCO_3$	890	810	860	920	860	870
MAGNESIUM HARDNESS AS $CaCO_3$	740	670	720	770	720	730

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW45A MSA-SW45A-081516 20160815	MSA-SW45B MSA-SW45B-081516 20160815	MSA-SW45C MSA-SW45C-081516 20160815	MSA-SW45D MSA-SW45D-081516 20160815
Volatile organic compounds (µg/L)				
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.27 U	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	1.4 U	1.4 U	1.5 U	1.2 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW45A MSA-SW45A-081516 20160815	MSA-SW45B MSA-SW45B-081516 20160815	MSA-SW45C MSA-SW45C-081516 20160815	MSA-SW45D MSA-SW45D-081516 20160815
CHLOROETHANE	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	0.39 J	0.43 J	0.35 J	0.37 J
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 U	0.32 U	0.32 U	0.32 U
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	0.46 J	0.44 J
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.25 U	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 UJ	4.9 UJ	4.9 UJ	4.9 UJ
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.86 J	0.82 J
TOTAL XYLENES	0.52 U	0.52 U	0.52 U	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.33 J	0.3 J	0.4 J	0.41 J
TRICHLOROFLUOROMETHANE	0.49 U	0.49 U	0.49 U	0.49 U
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	0.29 U	0.29 U	0.29 U	0.29 U
Tentatively identified compounds-volatile organic compounds (µg/L)				
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)				
1,4-DIOXANE	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW45A MSA-SW45A-081516 20160815	MSA-SW45B MSA-SW45B-081516 20160815	MSA-SW45C MSA-SW45C-081516 20160815	MSA-SW45D MSA-SW45D-081516 20160815
Dissolved metals (µg/L)				
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	1.8 J	1.8 U	2 J	2.1 J
BARIUM	43	35	42	43
BERYLLIUM	2 U	2 U	2 U	2 U
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U
CHROMIUM	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	3.9 J	3 J	5.4 J	6.9 J
LEAD	0.8 U	0.8 U	0.8 U	0.8 U
MERCURY	0.09 U	0.22	0.13 J	0.09 U
MOLYBDENUM	2.6 U	2.6 U	2.6 U	2.6 U
NICKEL	2.4 J	1.7 J	1.7 J	2 J
SELENIUM	3 U	2.4 U	3.2 U	2.5 U
SILVER	0.15 U	0.15 U	0.15 U	0.15 U
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U
ZINC	31 U	31 U	31 U	31 U
Miscellaneous parameters (µg/L)				
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U
Miscellaneous parameters (mg/L)				
CALCIUM HARDNESS AS $CaCO_3$	150	140	140	150
HARDNESS AS $CaCO_3$	880	790	870	880
MAGNESIUM HARDNESS AS $CaCO_3$	730	660	730	730

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW46A MSA-SW46A-081516 20160815	MSA-SW47A MSA-SW47A-081516 20160815	MSA-SW48A MSA-SW48A-081516 20160815	MSA-SW49A MSA-SW49A-081516 20160815
Volatile organic compounds (µg/L)				
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	NA	NA	NA
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 UJ	0.37 UJ	0.37 UJ	0.37 UJ
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 J	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.27 U	0.87 J	0.27 J
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U	0.99 U
ACETONE	0.94 U	0.94 U	0.94 U	0.94 U
BENZENE	0.35 U	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 UJ	0.43 UJ	0.43 UJ	0.43 UJ
CHLOROBENZENE	0.25 U	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 UJ	0.43 UJ	0.43 UJ	0.43 UJ
CHLORODIFLUOROMETHANE	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-August 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW46A MSA-SW46A-081516 20160815	MSA-SW47A MSA-SW47A-081516 20160815	MSA-SW48A MSA-SW48A-081516 20160815	MSA-SW49A MSA-SW49A-081516 20160815
CHLOROETHANE	0.32 U	0.32 U	0.32 U	0.32 U
CHLOROFORM	0.25 U	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	3.2	4.1	18	15
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 U	0.32 U	0.32 U	0.32 U
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 UJ	0.35 UJ	0.35 UJ	0.35 UJ
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	0.24 U	1.6 J	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.25 U	0.41 J	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 U	4.9 U	4.9 U	4.9 U
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	0.52 U	2	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	5.1	5.6	7	11
TRICHLOROFLUOROMETHANE	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ
VINYL ACETATE	0.41 U	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	1.5	1.9	16	7.5
Tentatively identified compounds-volatile organic compounds (µg/L)				
1-HEXANOL, 2-ETHYL-	NA	NA	NA	NA
HEXANAL	NA	NA	NA	NA
Semivolatile organic compounds (µg/L)				
1,4-DIOXANE	0.47 U	0.47 U	0.72 J	0.48 U

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Lockheed Martin, Martin State Airport, Middle River, Maryland

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Dissolved metals (µg/L)				
ANTIMONY	NA	NA	NA	NA
ARSENIC	NA	NA	NA	NA
BARIUM	NA	NA	NA	NA
BERYLLIUM	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA
COBALT	NA	NA	NA	NA
COPPER	NA	NA	NA	NA
LEAD	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA
MOLYBDENUM	NA	NA	NA	NA
NICKEL	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA
SILVER	NA	NA	NA	NA
THALLIUM	NA	NA	NA	NA
TUNGSTEN	NA	NA	NA	NA
VANADIUM	NA	NA	NA	NA
ZINC	NA	NA	NA	NA
Miscellaneous parameters (µg/L)				
HEXAVALENT CHROMIUM	NA	NA	NA	NA
Miscellaneous parameters (mg/L)				
CALCIUM HARDNESS AS $CaCO_3$	NA	NA	NA	NA
HARDNESS AS $CaCO_3$	NA	NA	NA	NA
MAGNESIUM HARDNESS AS $CaCO_3$	NA	NA	NA	NA

$CaCO_3$ - calcium carbonate
EL - Edwards Lane
µg/L - micrograms per liter
mg/L - milligrams per liter
MSA - Martin State Airport
SW - surface water
J - estimated concentration
NA - not analyzed
NJ - tentatively identified compound
U - not detected at the concentration left of the letter
UJ - not detected. Result is estimated.
UR - not detected. Result not reliable.