Lockheed Martin Corporation
1195 Sarasota Center Boulevard
Sarasota, Florida 34240
Telephone 240-687-1813

LOCKHEED MARTIN

April 6, 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: September 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 September 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

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: September 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.

April 2017



Michael Martin, P.G.
Regional Manager



Anthony Apanavage, P.G.
Project Manager

TABLE OF CONTENTS

Section **Page**

ACRONYMS ..... **iii**

1 INTRODUCTION **1-1**

2 SITE BACKGROUND AND PREVIOUS INVESTIGATIONS **2-1**

3 INVESTIGATION APPROACH AND METHODOLOGY **3-1**

3.1 SURFACE WATER SAMPLING 3-1

3.1.1 Surface Water Sampling and Chemical Analyses 3-1

3.1.2 Documentation 3-4

3.1.3 Sample Nomenclature and Handling 3-4

3.1.4 Equipment Decontamination 3-5

3.1.5 Waste Management 3-5

3.2 DATA MANAGEMENT 3-5

3.2.1 Data Tracking and Control 3-5

3.2.2 Sample Information 3-6

3.2.3 Project Data Compilation 3-6

3.2.4 Geographic Information System 3-6

3.3 DATA REVIEW 3-7

4 RESULTS **4-1**

4.1 SURFACE WATER DATA AND SCREENING CRITERIA 4-1

4.2 SURFACE WATER SAMPLING RESULTS 4-2

4.2.1 Volatile Organic Compounds 4-3

4.2.2 Metals 4-6

4.2.3 Hexavalent Chromium 4-6

4.3 UPCOMING 2016 SAMPLING ROUND 4-7

5 SUMMARY **5-1**

6 REFERENCES **6-1**

TABLE OF CONTENTS (continued)

APPENDICES

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

APPENDIX B—DATA-VALIDATION REPORTS

APPENDIX C—CHEMICAL-RESULTS DATA TABLE

LIST OF FIGURES

Page

Figure 1-1 Martin State Airport, Dump Road Area, and Frog Mortar Creek Location Map 1-3

Figure 2-1 Martin State Airport and Surrounding Features 2-3

Figure 2-2 Site Features and Areas of Concern, Dump Road Area 2-4

Figure 3-1 September 2016 Surface Water Sampling Locations 3-9

Figure 4-1 Concentrations of Trichloroethene in Surface Water Samples, September 2016 4-24

Figure 4-2 Concentrations of *cis*-1,2-Dichloroethene in Surface Water Samples, September 2016 4-25

Figure 4-3 Concentrations of Vinyl Chloride in Surface Water Samples, September 2016 4-26

LIST OF TABLES

Page

Table 3-1 List of Samples and Chemical Analyses for Surface Water—September 2016 3-8

Table 4-1 Summary of Analytes Detected in Surface Water Samples—September 2016 4-8

Table 4-2 Detected Analytes and Screening Level Exceedances in Surface Water Samples—September 2016 4-10

Table 4-3 Surface Water Chemical Results for Primary Volatile Organic Compounds for September 2016, August 2016, and September 2015 4-22

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

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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 September 26, 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 for volatile organic compounds possibly originating from 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:

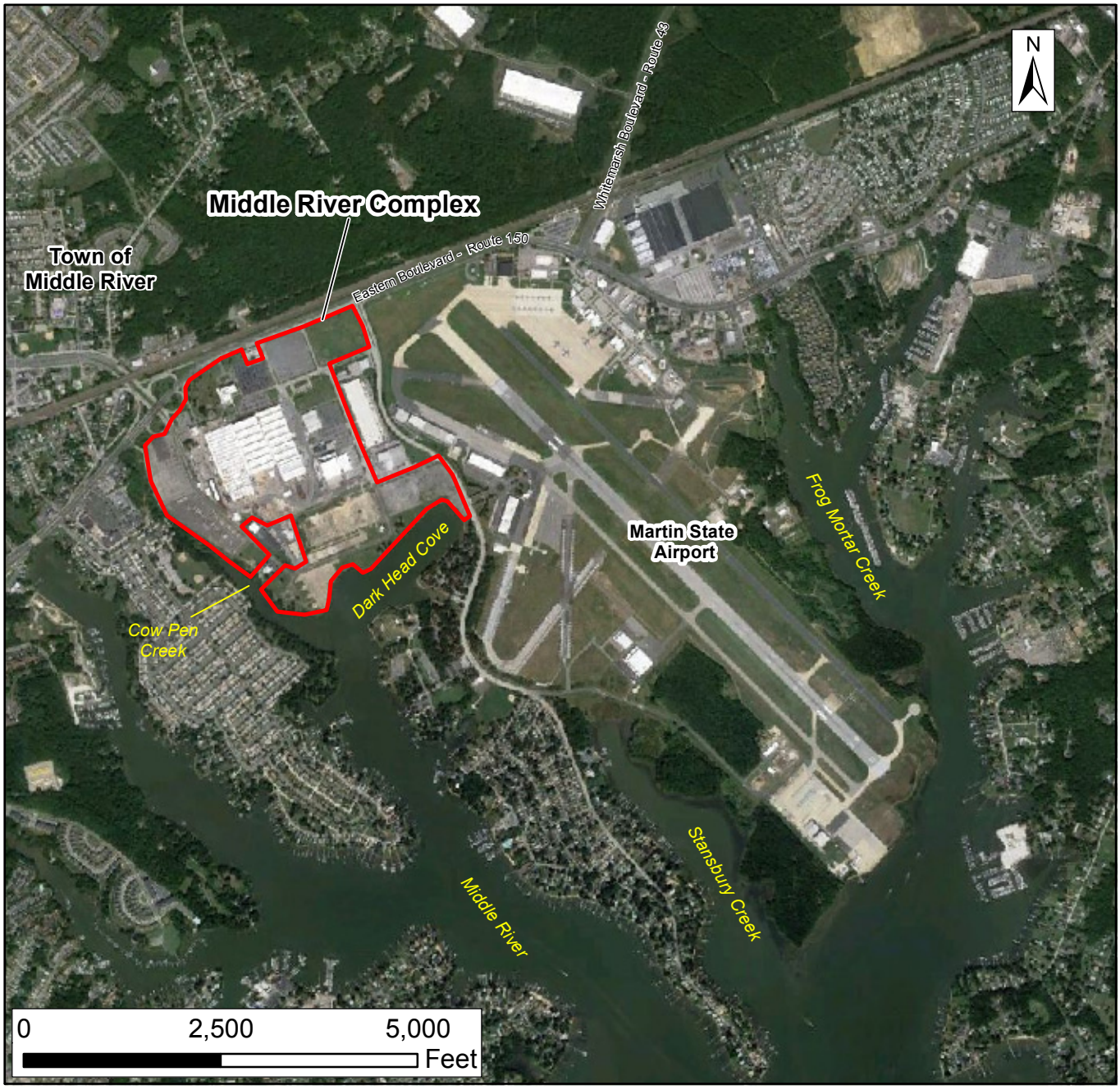
Section 2—Site Background and Previous Investigations: Briefly describes the site and previous Frog Mortar Creek investigations.

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.



Source: Google Earth, 2013

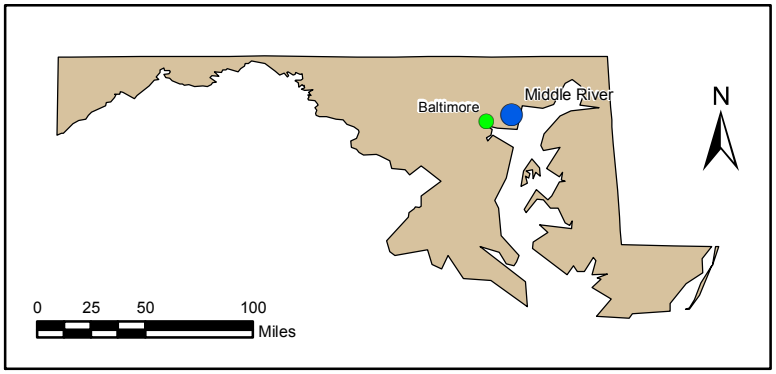


FIGURE 1-1

MIDDLE RIVER COMPLEX LOCATION MAP

Lockheed Martin Middle River Complex
Middle River, Maryland

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TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\MiddleRiver_MRC_Location Map_Fig 1-1_revised050113.mxd) 6/20/2013 -- 10:45:00 AM

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). 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)
- ***1,4-dioxane*—**Maryland does not have a groundwater standard for this compound, but concentrations have exceeded standards used in or proposed by other states
- ***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).

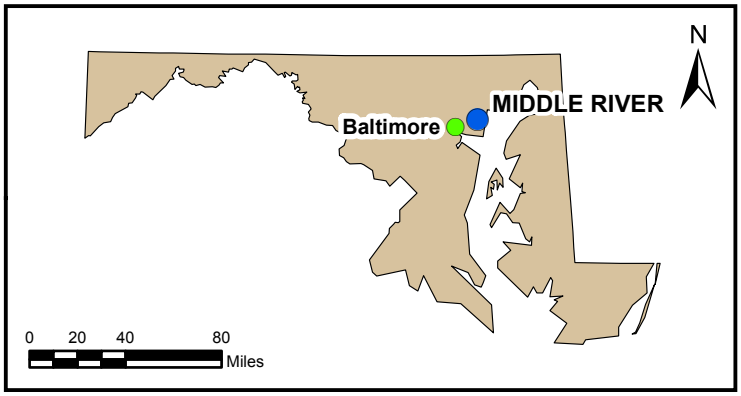

FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

Lockheed Martin, Martin State Airport
Middle River, Maryland

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11/12/14	JEE

TETRA TECH

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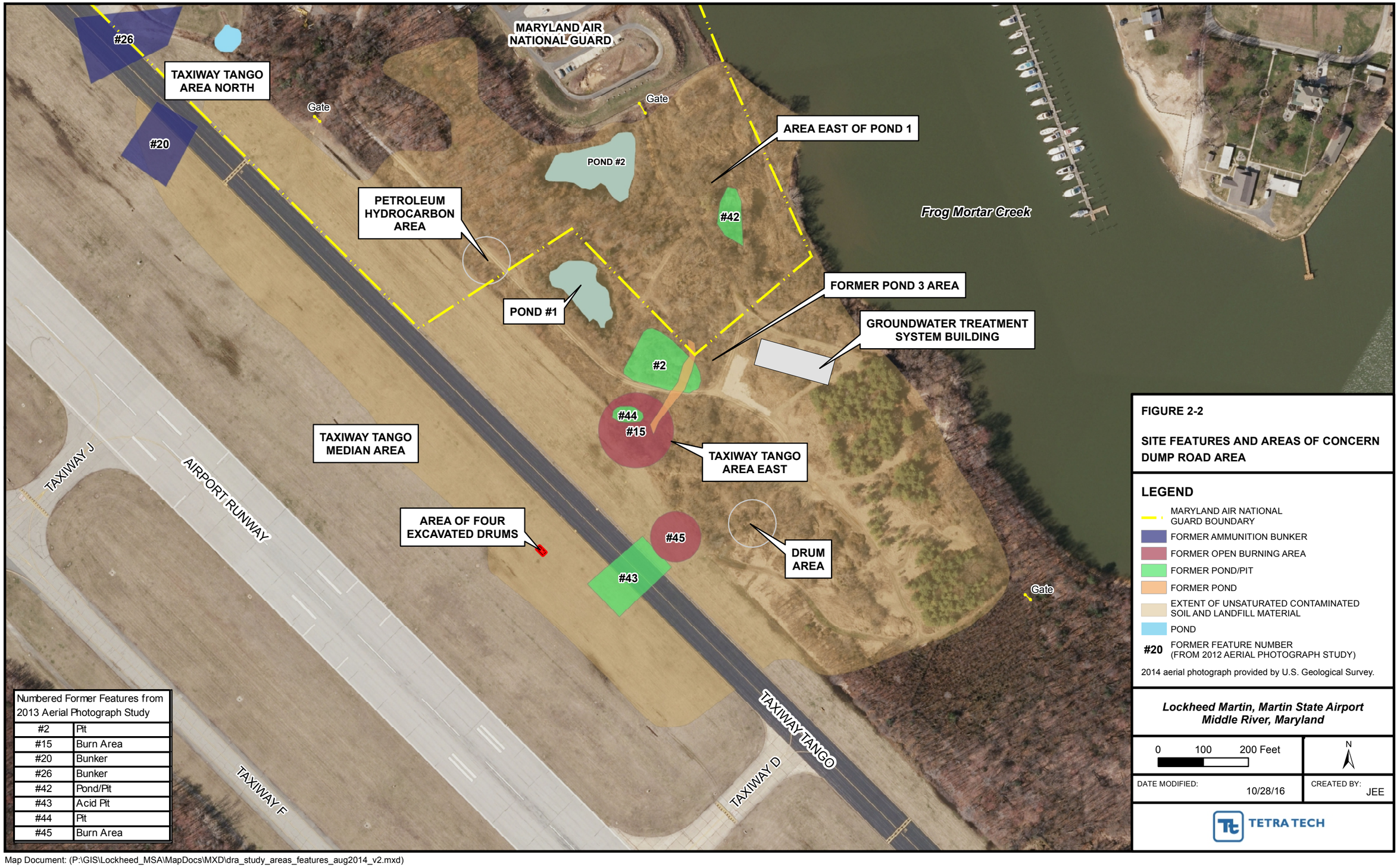

Numbered Former Features from 2013 Aerial Photograph Study	
#2	Pit
#15	Burn Area
#20	Bunker
#26	Bunker
#42	Pond/Pit
#43	Acid Pit
#44	Pit
#45	Burn Area

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

DATE MODIFIED: 10/28/16

CREATED BY: JEE

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 September 2016 sampling is the fifth of six surface-water sampling rounds planned for 2016. The September sampling round assessed water quality in fall, when some water-recreation is expected in Frog Mortar Creek and water temperatures are between maximums experienced in summer and minimums experienced in winter. The next sampling round is scheduled for December 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 September 26, 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 they 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 found 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. 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 sampling (1.0 meter [3.24 feet] at 0830 hours) and after sampling (1.1 meters [3.56 feet] at 1310 hours). 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 September 26, 2016 from MSA-SW37A would be labeled "MSA-SW37A-092616." The trip blank was labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-092616).

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 September 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 or *R* flags). 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.

R Result is unreliable due to deficiencies in satisfying quality control criteria. This flag was applied only to tentatively identified compounds reported this round (see "NJ" above).

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 deficiencies in satisfying quality control criteria.

Table 3-1

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

	Analyses Performed[1] (Method)			
	Volatile Organic Compounds[2]	Dissolved Metals	Hexavalent Chromium	Hardness
Sample Location ID	(USEPA 8260C)	(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
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
MSA-SW40B	X	X	X	X
MSA-SW40C	X	X	X	X
MSA-SW40D	X	X	X	X
MSA-SW41A	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
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			
MSA-SW47A	X			
MSA-SW48A	X			
MSA-SW49A	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 was measured and recorded in the field

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

SM - standard method

USEPA - United States Environmental Protection Agency



FIGURE 3-1

SEPTEMBER 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 September 26, 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: 12/08/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_samplocs_sep2016.mxd)
12/08/16 -- 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 September 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. 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)
- 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 (chromium, copper, 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.

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 four hours of swimming 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 September 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

Seven VOCs and nine metals (including hexavalent chromium) were detected in the September 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 (September 2016), the previous sampling round (August 2016), and the sampling round from one year ago (September 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 September 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. The maximum and average TCE concentrations detected in September 2016 (Table 4-3) are slightly higher than but are similar to those for the previous sampling event (August 2016), whereas maximum and average *cis*-1,2-DCE and VC concentrations are substantially lower than the previous sampling event. Average detected concentrations of TCE and *cis*-1,2-DCE are two times higher than a year ago (September 2015); however, the average of detected concentrations VC is lower than a year ago. In September 2016 (see Figure 4-1), the highest TCE concentrations were detected at SW40C (18 micrograms per liter [µg/L]) and at near-shore sampling locations SW38A (5.5 µg/L), SW47A (4.5 µg/L), SW41A (4.2 µg/L), and SW40B (4.2 µg/L) along the northern and central portions of the DRA. As presented in Figures 4-2 and 4-3, the highest *cis*-1,2-DCE and VC concentrations were detected at SW38A (7.6 µg/L and 4.5 µg/L, respectively) in the central portion of the DRA.

All VOC concentrations in the September 2016 surface water samples are less than human health consumption-of-organism and ecological screening-levels. However, one TCE concentration (18 µg/L) exceeds its swimming screening level (10 µg/L), and 14 VC concentrations (0.77–4.5 µg/L) exceed its screening level for swimming (0.7 µg/L), predominantly in near- and mid-shore samples adjacent to the DRA. All *cis*-1,2-DCE concentrations (0.26–7.6 µg/L) are below its swimming screening level (300 µg/L).

TCE was detected in 40 of 44 samples collected during this round, from both western and eastern shoreline samples, at concentrations ranging from 0.22 µg/L to 18 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 September 2016 TCE results maintain this trend, except that the maximum concentration (18 µg/L) occurred farther to the north and away from shore at location SW40C. The maximum TCE concentration for the current round (September 2016) is 1.6 times higher than the maximum

concentration detected during the last sampling round (11 µg/L in August 2016), and more than two times higher than the maximum concentration detected one year ago (7 µg/L in September 2015).

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, SW41, SW43, and SW45), where higher-concentration gradients appear to be present. The trend is less evident in the other transects (e.g., SW39 and SW42), where concentration gradients are lower or slightly reversed. This trend is strongly reversed at transect SW40, where the TCE maximum for this round is at the "C" sampling location, at a distance of 100 feet from shore.

Consistent with previous sampling rounds, TCE concentrations in samples collected from the eastern shoreline transect (SW01) were lower than samples collected from the western shoreline transects. TCE in eastern-shoreline samples was detected in a narrow concentration range (0.25–0.31 µg/L). These eastern-transect concentrations are similar to those detected in August 2016 (0.25–0.33 µg/L) and in September 2015 (0.3 µg/L). However, TCE was detected in all four SW01 samples in September 2016, whereas it was detected in only one SW01 sample in September 2015. Note that TCE is commonly detected at three to four of the four SW01 sampling locations throughout the year.

cis-1,2-DCE was detected in 33 of 44 samples at concentrations ranging from 0.26 µg/L to 7.6 µg/L (Table 4-1 and Figure 4-2); all concentrations were below the site-specific screening level for swimming (300 µg/L). *cis*-1,2-DCE concentrations were generally highest in the central transects, and are associated with locations having the highest TCE and VC concentrations. The highest *cis*-1,2-DCE concentration (7.6 µg/L) was at SW38A, with the next highest concentrations at SW40C (6.7 µg/L), SW41A (5.7 µg/L), and SW48A (5.3 µg/L). The maximum *cis*-1,2-DCE concentration in this round is approximately one-half the concentration detected during the last sampling round (18 µg/L in August 2016) and three-quarters of the maximum detected concentration last year (9.9 µg/L in September 2015).

The distribution of *cis*-1,2-DCE is similar to that of TCE and to its distribution in previous rounds: *cis*-1,2-DCE tends to decrease with increased distance from the shore in the higher concentration

transects. As shown in Figure 4-2, this trend is reflected at transects SW38A, SW41, SW43, and SW45 during the current (September 2016) sampling round. Similar to the TCE, this trend is strongly reversed at transect SW40, where the second highest *cis*-1,2-DCE concentration (and maximum TCE concentration) was detected at the "C" sample, 100 feet from shore.

VC was detected less frequently than TCE and *cis*-1,2-DCE in September 2016 (in 23 of 44 samples; see Table 4-1). This pattern is similar to previous rounds where TCE has the greatest frequency of detection followed by *cis*-1,2-DCE and then VC. VC was detected more frequently than last month (VC was detected in 18 of 44 samples in August 2016), and more frequently than last year (13 of 44 samples in September 2015). VC concentrations detected in September 2016 range from 0.34 µg/L to 4.5 µg/L (Table 4-1). Similar to *cis*-1,2-DCE, VC was detected at sampling locations along the central portion of the DRA, with the highest concentrations (4.5 µg/L) at SW38A, SW48A (3.3 µg/L), and SW41A (2.8 µg/L). VC was not detected in northernmost and southernmost transects (SW37, SW39, and SW45), or in samples collected from the eastern shoreline transect (SW01).

VC exceedances of the swimming screening level occurred at 13 locations in August 2016 (the previous sampling round) and at four locations in September 2015 (one year ago). The maximum VC concentration detected during this round is approximately one-fourth the maximum detected in August 2016 and September 2015 (16 µg/L for both at SW48A and SW47A, respectively). During this sampling event, VC concentrations at 14 locations exceed the screening level for swimming (0.7 µg/L):

- SW38A (4.5 µg/L)
- SW38B (2.7 µg/L)
- SW38C (1.2 µg/L)
- SW40A (0.77 µg/L)
- SW40B (0.83 µg/L)
- SW40C (2.1 µg/L)
- SW41A (2.8 µg/L)
- SW41B (1.7 µg/L)
- SW42A (0.96 µg/L)
- SW42B (1.6 µg/L)
- SW42C (1.1 µg/L)
- SW47A (1.1 µg/L)
- SW48A (3.3 µg/L)
- SW48A (2.1 µg/L)

Four additional VOCs (1,4-dichlorobenzene, *m+p* xylenes, acetone, and *o*-xylene) were detected at concentrations less than their respective screening levels. Six additional VOCs (carbon disulfide, 1,3-dichlorobenzene 1,4-dichlorobenzene, *m+p* xylenes, *o*-xylene, and toluene) were detected in addition to TCE, *cis*-1,2-DCE, and VC in August 2016, and four additional VOCs (1,4-dichlorobenzene, *m+p* xylenes, *o*-xylene, and toluene) were detected in September 2015.

4.2.2 Metals

Exceedances (50–64 µg/L) of dissolved barium at its lowest screening level (4 µg/L) were detected at all 36 locations for which barium was analyzed. Ten of the highest barium concentrations were detected in samples collected south of the DRA (in transects SW43–SW45, and SW39), with the two highest concentrations (61 and 64 µg/L) detected slightly north of the DRA at transect SW42 (samples SW42A and SW42B). Barium concentrations in September 2016 are higher than those detected last round (30–45 µg/L in August 2016) and last year (26–42 µg/L in September 2015). Barium is ubiquitous in creek samples, and has been detected in (varying) narrow concentration ranges in all samples collected in the creek since its first analysis in 2010.

The higher concentrations may be due, in part, to low regional precipitation in late August and September of this year, higher evaporation rates in summer and early fall months, and a moderate-severe drought in much of the Chesapeake Bay watershed (National Oceanic and Atmospheric Administration [NOAA], 2016). Low precipitation can result in higher salinity and dissolved solids (i.e., hardness and metals) in Chesapeake Bay and its tributaries. Salinity and hardness measured in Frog Mortar Creek in September 2016 were elevated at 5.4–5.6 parts per thousand and 1,200–1,400 mg/L, respectively. Salinity and hardness levels for other 2016 Frog Mortar Creek rounds range from 1.8–4.8 parts per thousand, and 310–920 mg/L, respectively.

Arsenic concentrations (1.8–2.9 µg/L) were detected in 26 of 36 locations (for which arsenic was analyzed) this round. All concentrations exceeded the lowest arsenic screening level (1.4 µg/L). Arsenic concentrations during this round (1.8–2.9 µg/L) are similar to those detected during the last round in August 2016 (1.8–2.9 µg/L), and are similar to concentrations detected last year (1.6–2.7 µg/L in September 2015). As with previous sampling rounds, the September 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).

4.2.3 Hexavalent Chromium

Hexavalent chromium has been detected in DRA groundwater and was therefore analyzed for in September 2016 surface water samples, as was the case in previous sampling rounds. Hexavalent chromium was detected in one September 2016 sample (SW42C) at a low concentration (0.12 µg/L), well below its screening criterion (11 µg/L). Previous sampling indicated the intermittent presence of low concentrations of hexavalent chromium in Frog Mortar Creek samples 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 surface water samples collected in August 2016, but was detected (0.052–0.073 µg/L) at 25 of 36 locations in which it was analyzed in September 2015. September 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 ROUND

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

Table 4-1

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

Parameter	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	40/44	91	0.22 J	18	0.22 U	0.22 U	MSA-SW40C	1.92	1.76
CIS-1,2-DICHLOROETHENE	33/44	75	0.26 J	7.6	0.26 U	0.26 U	MSA-SW38A	2.02	1.54
VINYL CHLORIDE	23/44	52	0.34 J	4.5	0.29 U	0.29 U	MSA-SW38A	1.35	0.78
1,4-DICHLOROBENZENE	2/44	5	0.33 J	0.4 J	0.27 U	0.27 U	MSA-SW48A	0.365	0.145
M+P-XYLENES	2/44	5	0.25 J	1.5 J	0.24 U	0.24 U	MSA-SW48A	0.875	0.154
ACETONE	1/44	2	0.94 J	0.94 J	0.94 U	0.94 U	EL-SW01B	0.940	0.481
O-XYLENE	1/44	2	0.32 J	0.32 J	0.25 U	0.25 U	MSA-SW48A	0.320	0.129
TOTAL XYLENES	1/44	2	1.8 J	1.8 J	0.52 U	0.52 U	MSA-SW48A	1.80	0.295
Volatile organic compound tentatively identified compound (µg/L)									
ETHANETHIOAMIDE	1/1	100	2 NJ	2 NJ	--	--	MSA-SW38D	2.0	2.0
Dissolved metals (µg/L)									
BARIUM	36/36	100	50	64	--	--	MSA-SW42A	55.0	55.0
MOLYBDENUM	36/36	100	2.7 J	4 J	--	--	MSA-SW42A	2.93	2.93
NICKEL	36/36	100	2.1 J	3.6 J	--	--	MSA-SW42B	2.85	2.85
ARSENIC	26/36	72	1.8 J	2.9 J	1.8 U	1.8 U	MSA-SW42A	2.01	1.70
COPPER	21/36	58	3.1 J	14	3.5 U	6 U	MSA-SW45B	4.82	3.77
COBALT	3/36	8	0.8 J	1 J	0.65 U	0.89 U	MSA-SW40C	0.930	0.379
CHROMIUM	2/36	6	1.3 J	1.9 J	1.3 U	1.7 U	MSA-SW39D	1.60	0.717
ZINC	2/36	6	39 J	370	31 U	32 U	MSA-SW38D	204.5	26.0
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS AS CACO3	36/36	100	200	230	--	--	MSA-SW43C, 42AB,43A,B,D	215.3	215.3
HARDNESS AS CACO3	36/36	100	1200	1400	--	--	MSA-SW42A,B, 43A-D	1297.2	1297.2
MAGNESIUM HARDNESS AS CACO3	36/36	100	1000	1200	--	--	MSA-SW43B	1066.7	1066.7

Table 4-1

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

Parameter	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 (µg/L)									
HEXAVALENT CHROMIUM	1/36	3	0.12 J	0.12 J	0.052 U	0.052 U	MSA-SW42C	0.120	0.029

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.

-- Value not available because frequency of detection is 100 percent (i.e., no non-detect concentrations).

$CaCO_3$ - calcium carbonate

EL - Edwards Lane

J - estimated value

µg/L - micrograms per liter

mg/L - milligrams per liter

MSA - Martin State Airport

NJ - tentatively identified compound. Indicates presumptive evidence of a compound. Special methods may be required to confirm its presence or absence in future sampling efforts.

SW - surface water

U - not detected at the concentration shown left of the letter

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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]	EL-SW01A EL-SW01A-092616 20160926	EL-SW01B EL-SW01B-092616 20160926	EL-SW01C EL-SW01C-092616 20160926	EL-SW01D EL-SW01D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	0.94 J	--	--
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	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.31 J	0.28 J	0.3 J	0.25 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	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
CHROMIUM	1773 [7]	231 [7]	231 [7]	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
MOLYBDENUM	NA	NA	NA [6]	NA	NA	NA	NA	NA	NA
NICKEL	1513 [7]	168 [7]	168 [7]	4600	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 $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	NA
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	NA	NA	NA	NA

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-092616 20160926	MSA-SW37B MSA-SW37B-092616 20160926	MSA-SW37C MSA-SW37C-092616 20160926	MSA-SW37D MSA-SW37D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	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	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	--	--	--	--
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	1.9 J	2.4 J	2.2 J	2.4 J
BARIUM	NA	NA	4	NA	NA	52	55	52	57
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	1.3 J
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3.9 J	4.5 J	4.9 J	5.8 J
MOLYBDENUM	NA	NA	NA [6]	NA	NA	3 J	3.1 J	3 J	3.2 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.1 J	2.8 J	3 J	3 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	200	210	210	220
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1200	1300	1200	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1000	1000	1000	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-092616 20160926	MSA-SW38B MSA-SW38B-092616 20160926	MSA-SW38C MSA-SW38C-092616 20160926	MSA-SW38D MSA-SW38D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	0.33 J	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	7.6	4.2	2.6	1
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	5.5	4	3.9	1.5
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	4.5	2.7	1.2	0.38 J
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA	NA	NA	2 NJ
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	1.9 J	1.8 J	1.8 J	2 J
BARIUM	NA	NA	4	NA	NA	53	50	52	53
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3.1 J	3.3 J	3.4 J	4.3 J
MOLYBDENUM	NA	NA	NA [6]	NA	NA	2.7 J	2.7 J	2.8 J	2.9 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.9 J	2.8 J	2.8 J	2.6 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	370
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	210	210	210	210
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1300	1200	1200	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1000	1000	1000	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-SW39A MSA-SW39A-092616 20160926	MSA-SW39B MSA-SW39B-092616 20160926	MSA-SW39C MSA-SW39C-092616 20160926	MSA-SW39D MSA-SW39D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	--	0.29 J	0.26 J	0.27 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.23 J	0.33 J	0.29 J	0.28 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	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
BARIUM	NA	NA	4	NA	NA	53	54	56	54
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	1.9 J
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3.6 J	7.3 J	3.2 J	4.1 J
MOLYBDENUM	NA	NA	NA [6]	NA	NA	2.8 J	2.9 J	2.7 J	2.9 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.5 J	3.4 J	2.8 J	3.5 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	39 J	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	210	210	210	220
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1300	1300	1300	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1100	1000	1100	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-092616 20160926	MSA-SW40B MSA-SW40B-092616 20160926	MSA-SW40C MSA-SW40C-092616 20160926	MSA-SW40D MSA-SW40D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	1.9	2.2	6.7	1.2
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	2.9	4.2	18	2.3
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.77	0.83	2.1	0.39 J
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	2 J	1.8 J	2.1 J	2 J
BARIUM	NA	NA	4	NA	NA	57	55	57	54
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	1 J	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	4.1 J	4.1 J	4.4 J	6.3 J
MOLYBDENUM	NA	NA	NA [6]	NA	NA	3 J	2.8 J	2.8 J	2.8 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	3.1 J	3.3 J	3.1 J	2.9 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	220	220	220	210
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1300	1300	1300	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1100	1100	1100	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-SW41A MSA-SW41A-092616 20160926	MSA-SW41B MSA-SW41B-092616 20160926	MSA-SW41C MSA-SW41C-092616 20160926	MSA-SW41D MSA-SW41D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	5.7	3.9	1.6	0.58 J
M+P-XYLENES	NA	NA	13	NA	NA	0.25 J	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	4.2	3.3	1.5	0.75 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	2.8	1.7	0.7	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	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	1.9 J
BARIUM	NA	NA	4	NA	NA	53	52	54	53
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	3.7 J	3.6 J	4.2 J	5.5 J
MOLYBDENUM	NA	NA	NA [6]	NA	NA	2.8 J	2.7 J	2.7 J	2.7 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.4 J	2.2 J	2.3 J	2.6 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	210	200	200	210
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1200	1200	1200	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1000	1000	1000	1000
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-SW42A MSA-SW42A-092616 20160926	MSA-SW42B MSA-SW42B-092616 20160926	MSA-SW42C MSA-SW42C-092616 20160926	MSA-SW42D MSA-SW42D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	0.71 J	0.99 J	0.72 J	0.38 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.23 J	0.23 J	0.25 J	0.3 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.96	1.6	1.1	0.34 J
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	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	2.5 J	--	1.8 J
BARIUM	NA	NA	4	NA	NA	64	61	55	55
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	0.99 J	0.8 J	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA [6]	NA	NA	4 J	3.2 J	2.7 J	2.9 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	3.5 J	3.6 J	2.8 J	2.6 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	230	230	210	210
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1400	1400	1300	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1100	1100	1000	1000
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	0.12 J	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-092616 20160926	MSA-SW43B MSA-SW43B-092616 20160926	MSA-SW43C MSA-SW43C-092616 20160926	MSA-SW43D MSA-SW43D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	2.3	1.7	0.78 J	0.84 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	1.7	1.3	0.69 J	0.79 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.52	0.36 J	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	--	1.9 J	1.9 J	2 J
BARIUM	NA	NA	4	NA	NA	58	57	57	58
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA [6]	NA	NA	3.1 J	2.9 J	3.2 J	3 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.7 J	2.7 J	2.9 J	2.5 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	230	230	230	230
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1400	1400	1400	1400
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1100	1200	1100	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-SW44A MSA-SW44A-092616 20160926	MSA-SW44B MSA-SW44B-092616 20160926	MSA-SW44C MSA-SW44C-092616 20160926	MSA-SW44D MSA-SW44D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	1.5	2.1	0.52 J	0.33 J
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	1.2	1.6	0.54 J	0.38 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.42 J	0.55	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved metals (µg/L)									
ARSENIC	340	150	NA [6]	1.4 [3]	NA	--	--	1.9 J	1.8 J
BARIUM	NA	NA	4	NA	NA	52	56	56	54
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA [6]	NA	NA	2.9 J	2.9 J	2.8 J	2.9 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	2.8 J	3.2 J	3.2 J	2.6 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	210	220	220	210
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1300	1300	1300	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1100	1100	1100	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-SW45A MSA-SW45A-092616 20160926	MSA-SW45B MSA-SW45B-092616 20160926	MSA-SW45C MSA-SW45C-092616 20160926	MSA-SW45D MSA-SW45D-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	0.34 J	0.28 J	--	--
M+P-XYLENES	NA	NA	13	NA	NA	--	--	--	--
O-XYLENE	NA	NA	13	NA	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.43 J	0.33 J	0.26 J	0.28 J
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	--	--	--	--
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	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	1.9 J	2 J
BARIUM	NA	NA	4	NA	NA	56	52	57	56
CHROMIUM	1773 [7]	231 [7]	231 [7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	49.6 [7]	29.3 [7]	29.3 [7]	NA	NA	--	14	--	--
MOLYBDENUM	NA	NA	NA [6]	NA	NA	3 J	3 J	3 J	3 J
NICKEL	1513 [7]	168 [7]	168 [7]	4600	NA	3.1 J	3 J	2.6 J	2.8 J
ZINC	379 [7]	382 [7]	382 [7]	26000	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	220	210	220	220
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1300	1300	1300	1300
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	1100	1100	1100	1100
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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-092616 20160926	MSA-SW47A MSA-SW47A-092616 20160926	MSA-SW48A MSA-SW48A-092616 20160926	MSA-SW49A MSA-SW49A-092616 20160926
Volatile organic compounds (µg/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	0.4 J	--
ACETONE	NA	NA	1500	NA	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590 [5]	NA	300	0.54 J	2.7	5.3	4.5
M+P-XYLENES	NA	NA	13	NA	NA	--	--	1.5 J	--
O-XYLENE	NA	NA	13	NA	NA	--	--	0.32 J	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	1.8 J	--
TRICHLOROETHENE	NA	NA	21	300 [3]	10	0.22 J	4.5	3.8	3.6
VINYL CHLORIDE	NA	NA	930	24 [3]	0.7	0.65	1.1	3.3	2.1
Volatile organic compound tentatively identified compounds (µg/L)									
ETHANETHIOAMIDE	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
CHROMIUM	1773 [7]	231 [7]	231 [7]	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
MOLYBDENUM	NA	NA	NA [6]	NA	NA	NA	NA	NA	NA
NICKEL	1513 [7]	168 [7]	168 [7]	4600	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 $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	NA
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous parameters (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	NA	NA	NA	NA

Table 4-2

Detected Analytes and Screening Level Exceedances in Surface Water Samples-September 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 1,200 mg/L for September 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 September 2016, August 2016, and September 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)		
	September 26, 2016	August 15, 2016	September 8, 2015	September 26, 2016	August 15, 2016	September 8, 2015	September 26, 2016	August 15, 2016	September 8, 2015
Average-Detections	1.92	1.86	0.89	2.02	3.27	1.02	1.35	3.77	1.96
Average-All Samples[1]	1.76	1.82	0.73	1.55	2.55	0.70	0.78	1.63	0.68
Maximum Concentration	18	11	7	7.6	18	9.9	4.5	16	16
No. of Detections/Samples	40/44	43/44	35/44	33/44	33/44	28/44	23/44	18/44	13/44
EL-SW01A	0.31 J	0.25 J	--	--	--	--	--	--	--
EL-SW01B	0.28 J	0.32 J	--	--	--	--	--	--	--
EL-SW01C	0.3 J	0.26 J	--	--	--	--	--	--	--
EL-SW01D	0.25 J	0.33 J	0.3 J	--	0.26 J	--	--	--	--
MSA-SW37A	--	0.24 J	--	--	--	--	--	--	--
MSA-SW37B	--	0.3 J	--	--	--	0.26 J	--	--	0.31 J
MSA-SW37C	--	0.25 J	2.4	--	--	0.86 J	--	--	0.33 J
MSA-SW37D	--	0.25 J	0.25 J	--	--	--	--	--	--
MSA-SW38A	5.5	6.3	0.96 J	7.6	10	2.6	4.5	7.8	3.5
MSA-SW38B	4	5.5	0.59 J	4.2	7.4	0.38 J	2.7	4.4	--
MSA-SW38C	3.9	1.3	0.61 J	2.6	0.99 J	0.38 J	1.2	0.43 J	--
MSA-SW38D	1.5	0.72 J	0.32 J	1	0.51 J	--	0.38 J	--	--
MSA-SW39A	0.23 J	0.24 J	--	--	0.35 J	--	--	--	--
MSA-SW39B	0.33 J	0.23 J	--	0.29 J	0.26 J	--	--	--	--
MSA-SW39C	0.29 J	0.23 J	--	0.26 J	0.26 J	--	--	--	--
MSA-SW39D	0.28 J	--	--	0.27 J	--	--	--	--	--
MSA-SW40A	2.9	3.9	0.8 J	1.9	3.1	0.92 J	0.77	1.5	0.57
MSA-SW40B	4.2	4.3	7	2.2	2.2	2.1	0.83	0.97	0.83
MSA-SW40C	18	0.72 J	1.3	6.7	0.42 J	0.6 J	2.1	--	0.33 J
MSA-SW40D	2.3	0.37 J	0.35 J	1.2	--	--	0.39 J	--	--
MSA-SW41A	4.2	6.9	1.6	5.7	12	1.5	2.8	6.8	0.63
MSA-SW41B	3.3	6.1	0.83 J	3.9	11	0.7 J	1.7	5.3	0.47 J
MSA-SW41C	1.5	0.54 J	0.34 J	1.6	0.44 J	--	0.7	--	--

Table 4-3

Surface Water Chemical Results for Primary Volatile Organic Compounds for September 2016, August 2016, and September 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)		
	September 26, 2016	August 15, 2016	September 8, 2015	September 26, 2016	August 15, 2016	September 8, 2015	September 26, 2016	August 15, 2016	September 8, 2015
MSA-SW41D	0.75 J	0.47 J	0.29 J	0.58 J	0.34 J	--	--	--	--
MSA-SW42A	0.23 J	0.34 J	0.33 J	0.71 J	2.5	0.27 J	0.96	4.3	--
MSA-SW42B	0.23 J	0.4 J	0.72 J	0.99 J	3	0.65 J	1.6	5.4	0.34 J
MSA-SW42C	0.25 J	0.41 J	2	0.72 J	1.4	0.96 J	1.1	2	0.49 J
MSA-SW42D	0.3 J	0.28 J	0.45 J	0.38 J	--	0.3 J	0.34 J	--	--
MSA-SW43A	1.7	2.5	0.65 J	2.3	4.6	0.67 J	0.52	0.7	--
MSA-SW43B	1.3	2	0.72 J	1.7	3.5	0.46 J	0.36 J	0.58	--
MSA-SW43C	0.69 J	0.9 J	0.49 J	0.78 J	1.4	0.3 J	--	0.38 J	--
MSA-SW43D	0.79 J	0.53 J	0.41 J	0.84 J	0.39 J	0.27 J	--	--	--
MSA-SW44A	1.2	1	0.42 J	1.5	1.5	0.29 J	0.42 J	0.38 J	--
MSA-SW44B	1.6	0.5 J	0.57 J	2.1	0.46 J	0.36 J	0.55	--	--
MSA-SW44C	0.54 J	0.41 J	0.64 J	0.52 J	0.44 J	0.32 J	--	--	--
MSA-SW44D	0.38 J	0.49 J	0.58 J	0.33 J	0.45 J	0.29 J	--	--	--
MSA-SW45A	0.43 J	0.33 J	0.36 J	0.34 J	0.39 J	0.3 J	--	--	--
MSA-SW-45B	0.33 J	0.3 J	0.56 J	0.28 J	0.43 J	0.33 J	--	--	--
MSA-SW45C	0.26 J	0.4 J	0.3 J	--	0.35 J	--	--	--	--
MSA-SW45D	0.28 J	0.41 J	0.49 J	--	0.37 J	0.31 J	--	--	--
MSA-SW46A	0.22 J	5.1	0.31 J	0.54 J	3.2	--	0.65	1.5	--
MSA-SW47A	4.5	5.6	1.3	2.7	4.1	9.9	1.1	1.9	16
MSA-SW48A	3.8	7	0.96 J	5.3	18	1.2	3.3	16	1.1
MSA-SW49A	3.6	11	1.1	4.5	15	1.1	2.1	7.5	0.52

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, SEPTEMBER 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

(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 SEPTEMBER 26, 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: 12/08/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_tce_results_201609.mxd)
12/08/16 -- JEE



FIGURE 4-2

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES, SEPTEMBER 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 SEPTEMBER 26, 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: 11/17/16

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FIGURE 4-3

CONCENTRATIONS OF VINYL CHLORIDE IN SURFACE WATER SAMPLES, SEPTEMBER 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 SEPTEMBER 26, 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: 12/08/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_VC_results_201609.mxd)
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Section 5
Summary

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

- Surface water samples were collected from Frog Mortar Creek on September 26, 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.

- 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), and metals, were detected in the September 2016 surface water samples. Concentrations of volatile organic compounds and metals (except arsenic and barium) were less than human health consumption-of-organism and ecological screening-levels.

- Trichloroethene was detected in 40 of 44 samples at concentrations ranging from 0.22-18 micrograms per liter (µg/L). One trichloroethene concentration (18 µg/L at SW40C) exceeded its swimming criterion (10 µg/L). The highest trichloroethene concentrations were detected in transects SW38, SW40, and SW41 along the northern and central portions of the Dump Road Area.

- *cis*-1,2-Dichloroethene was detected below its swimming criterion (300 µg/L) in 33 of 44 samples, at concentrations ranging from 0.26–7.6 µg/L. The highest concentrations were detected in transects SW38, SW40, and SW41, along the northern and central portions of the Dump Road Area.

- Vinyl chloride was detected in 23 of 44 samples at concentrations ranging from 0.34-4.5 µg/L. Fourteen vinyl chloride concentrations along the northern, central, and southern portions of the Dump Road Area exceeded the swimming criterion (0.7 µg/L). The highest concentrations were in transects SW38 and SW41, along the central and south-central portions of the Dump Road Area. The frequency of exceedances in September 2016 is an increase as compared to last year (September 2015), when only four vinyl chloride concentrations exceeded its swimming criterion. This higher frequency of exceedances has occurred several times in the past, most recently in August 2016 (13 exceedances).

- The maximum and average trichloroethene concentrations in the September 2016 surface water samples are slightly higher than (but similar to) those detected in the previous sampling round (August 2016), and are approximately two times higher than concentrations detected a year ago (September 2015). The maximum and average *cis*-1,2-dichloroethene and vinyl chloride concentrations are substantially lower than the previous round (August 2016). Average *cis*-1,2-dichloroethene concentrations are two times higher than a year ago (September 2015) (maximums are similar). Average and maximum vinyl chloride concentrations are lower than a year ago, although vinyl chloride was detected more frequently in September 2016.

- Trichloroethene was detected at trace concentrations (0.25–0.31 µg/L) in the four samples collected along the eastern-shoreline (SW01A–SW01D). *cis*-1,2-Dichloroethene and vinyl chloride were not detected in any of the September 2016 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.

- Dissolved barium exceeded its screening level in all 36 samples collected in September 2016. Barium is ubiquitous in creek samples; the September 2016 concentrations (50–64 µg/L) are higher than those detected in August 2016 (30–45 µg/L) and September 2015 (26–42 µg/L). The higher concentrations may be due, in part, to low precipitation in late August and September of this year, higher evaporation rates, and a moderate-severe drought in much of the Chesapeake Bay watershed. Low precipitation can result in higher salinity and dissolved solids in Chesapeake Bay and its tributaries.

- Arsenic (1.8–2.9 µg/L) was detected in 72% of samples collected during this round, and all detected concentrations exceeded the lowest arsenic screening level (1.4 µg/L). Arsenic concentrations for September 2016 are similar to those detected in August 2016 (1.8–2.9 µg/L) and September 3015 (1.6–2.7 µg/L). As indicated by previous sampling, arsenic concentrations are within the range of background (2.2-3.9 µg/L) established during Lockheed Martin's larger-scale 2007–2008 Frog Mortar Creek investigation.

- Dissolved hexavalent chromium was detected in one sample only, at a concentration (0.12 µg/L) well below the lowest screening level (11 µg/L). 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 December 2016.

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Section 6
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APPENDIX A—FIELD MEASUREMENTS FOR WATER QUALITY AND SURFACE WATER SAMPLE LOG SHEETS

Water Quality Field Parameters-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River Maryland

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	-92616	9/26/2016	0835	6.48	9.6	22.44	3.64	5.83	5.4	204	0.3
EL-SW01B	-92616	9/26/2016	0840	6.88	9.6	22.74	5.28	6.44	5.4	175	1.2
EL-SW01C	-92616	9/26/2016	0842	7.04	9.7	22.98	6.12	3.95	5.4	183	1.5
EL-SW01D	-92616	9/26/2016	0846	7.20	9.6	23.12	5.50	4.16	5.4	177	>2.0
MSA-SW37A	-92616	9/26/2016	1242	7.78	9.5	22.05	3.84	4.35	5.3	152	0.7
MSA-SW37B	-92616	9/26/2016	1247	7.78	9.5	22.19	8.85	4.15	5.3	150	1.2
MSA-SW37C	-92616	9/26/2016	1251	7.74	9.5	22.30	5.89	3.93	5.3	150	1.6
MSA-SW37D	-92616	9/26/2016	1256	7.78	9.5	22.53	6.33	4.72	5.3	158	1.7
MSA-SW38A	-92616	9/26/2016	1109	7.39	9.6	22.35	3.45	3.06	5.4	125	0.4
MSA-SW38B	-92616	9/26/2016	1115	7.42	9.6	22.33	6.51	3.33	5.4	153	1.3
MSA-SW38C	-92616	9/26/2016	1121	7.48	9.6	22.37	4.37	2.81	5.4	157	1.5
MSA-SW38D	-92616	9/26/2016	1127	7.47	9.7	22.50	2.78	3.79	5.4	164	1.7
MSA-SW39A	-92616	9/26/2016	0855	7.38	9.8	22.57	5.59	3.08	5.5	165	0.6
MSA-SW39B	-92616	9/26/2016	0900	7.32	9.8	22.40	8.51	2.49	5.5	160	1.2
MSA-SW39C	-92616	9/26/2016	0906	7.28	9.8	22.70	6.51	2.83	5.5	165	1.2
MSA-SW39D	-92616	9/26/2016	0913	7.31	9.9	22.80	5.39	3.22	5.6	168	1.4
MSA-SW40A	-92616	9/26/2016	1143	7.55	9.6	22.27	3.89	3.80	5.4	148	0.7
MSA-SW40B	-92616	9/26/2016	1147	7.52	9.6	22.36	3.72	4.17	5.4	139	0.9
MSA-SW40C	-92616	9/26/2016	1151	7.52	9.6	22.33	8.12	3.67	5.4	140	1.2
MSA-SW40D	-92616	9/26/2016	1157	7.52	9.7	22.77	6.37	4.14	5.4	146	1.7
MSA-SW41A	-92616	9/26/2016	1042	7.36	9.7	22.37	3.81	2.88	5.4	138	0.6
MSA-SW41B	-92616	9/26/2016	1045	7.34	9.7	22.50	3.20	3.21	5.4	132	0.6
MSA-SW41C	-92616	9/26/2016	1050	7.34	9.7	22.56	3.14	2.97	5.5	137	1.3
MSA-SW41D	-92616	9/26/2016	1054	7.43	9.8	22.86	3.17	4.43	5.5	163	1.7
MSA-SW42A	-92616	9/26/2016	1215	7.57	9.5	22.42	6.29	3.00	5.3	130	0.8
MSA-SW42B	-92616	9/26/2016	1220	7.49	9.5	22.43	5.22	3.96	5.3	130	0.9
MSA-SW42C	-92616	9/26/2016	1224	7.49	9.6	22.39	5.68	3.47	5.4	141	1.2
MSA-SW42D	-92616	9/26/2016	1228	7.54	9.6	22.39	5.71	4.14	5.4	150	1.7
MSA-SW43A	-92616	9/26/2016	1014	7.49	9.7	22.46	2.26	4.45	5.4	187	0.6
MSA-SW43B	-92616	9/26/2016	1018	7.45	9.7	22.44	5.12	4.06	5.5	178	1.5
MSA-SW43C	-92616	9/26/2016	1022	7.50	9.8	22.53	5.01	4.50	5.5	189	1.7
MSA-SW43D	-92616	9/26/2016	1026	7.52	9.8	22.70	3.65	3.79	5.5	196	1.7
MSA-SW44A	-92616	9/26/2016	0948	7.47	9.7	22.36	2.76	3.84	5.4	191	0.5
MSA-SW44B	-92616	9/26/2016	0954	7.42	9.7	22.41	2.03	3.59	5.4	180	0.8
MSA-SW44C	-92616	9/26/2016	0957	7.42	9.8	22.70	3.05	3.70	5.5	183	1.7
MSA-SW44D	-92616	9/26/2016	1007	7.51	9.8	23.01	5.97	4.43	5.5	199	1.7
MSA-SW45A	-92616	9/26/2016	0923	7.46	9.8	22.35	3.49	3.30	5.5	166	0.3
MSA-SW45B	-92616	9/26/2016	0930	7.49	9.7	22.96	7.50	4.60	5.5	182	1.7
MSA-SW45C	-92616	9/26/2016	0936	8.88	9.8	23.06	6.00	4.44	5.5	197	1.7
MSA-SW45D	-92616	9/26/2016	0941	7.51	9.9	23.10	8.21	4.46	5.5	198	1.7
MSA-SW46A	-92616	9/26/2016	1211	7.54	9.5	22.50	5.14	3.01	5.4	127	0.7
MSA-SW47A	-92616	9/26/2016	1138	7.56	9.6	22.27	4.91	3.92	5.4	155	0.6
MSA-SW48A	-92616	9/26/2016	1103	7.75	9.6	22.45	5.41	2.61	5.4	108	0.8
MSA-SW49A	-92616	9/26/2016	1037	7.42	9.7	22.26	3.30	2.57	5.4	151	0.3

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0835	**Clear**	**6.48**	**9.55**	**22.44**	**3.64**	**5.83**	**5.4**	**204**
Depth:	1 ft below water								
Method:	Grab								

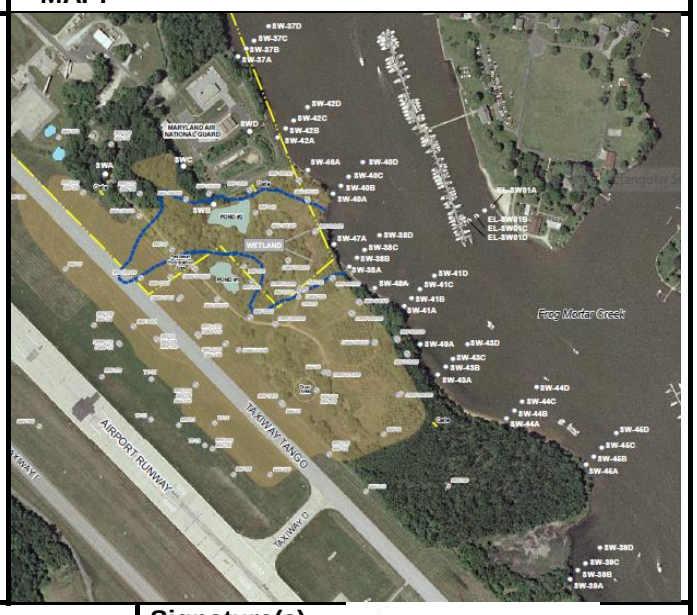
SAMPLE COLLECTION INFORMATION:

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):

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0840	**Clear**	**6.88**	**9.6**	**22.74**	**5.28**	**6.44**	**5.4**	**175**
Depth:	1 ft below water								
Method:	Grab								

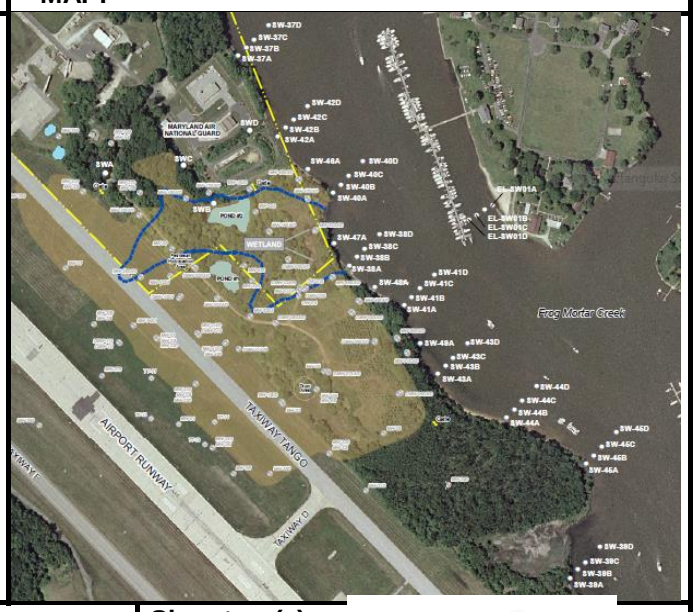
SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.2 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0842	**Clear**	**7.04**	**9.7**	**22.98**	**6.12**	**3.95**	**5.4**	**183**
Depth:	1 ft below water								
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.5 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.: EL-SW01D -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0846	**Clear**	**7.2**	**9.6**	**23.12**	**5.5**	**4.16**	**5.4**	**177**
Depth:	1 ft below water								
Method:	Grab								

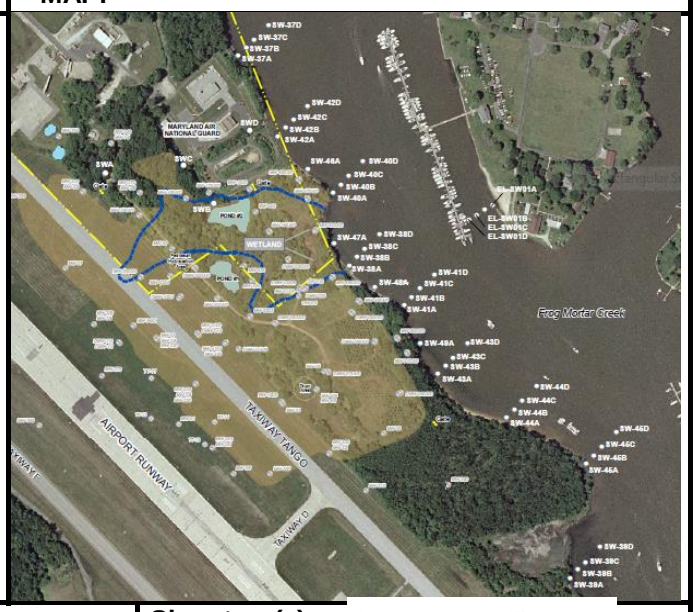
SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >2.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1242	**Clear**	**7.78**	**9.5**	**22.05**	**3.84**	**4.35**	**5.3**	**152**
Depth:	1 ft below water								
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):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1247	**Clear**	**7.78**	**9.5**	**22.19**	**8.85**	**4.15**	**5.3**	**150**
Depth:	1 ft below water								
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):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1251	**Clear**	**7.74**	**9.5**	**22.3**	**5.89**	**3.93**	**5.3**	**150**
Depth:	1 ft below water								
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):

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1256	**Clear**	**7.78**	**9.5**	**22.53**	**6.33**	**4.72**	**5.3**	**158**
Depth:	1 ft below water								
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):

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1109	**Clear**	**7.39**	**9.6**	**22.35**	**3.45**	**3.06**	**5.4**	**125**
Depth:	1 ft below water								
Method:	Grab								

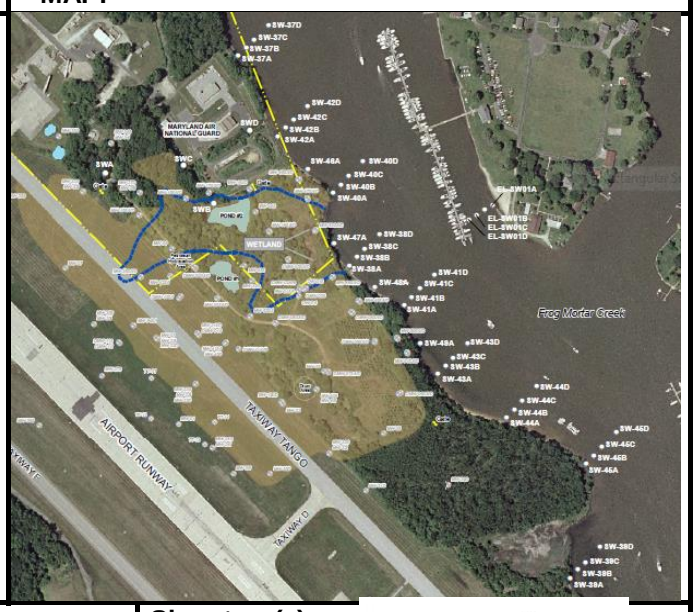
SAMPLE COLLECTION INFORMATION:

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):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1115	**Clear**	**7.42**	**9.6**	**22.33**	**6.51**	**3.33**	**5.4**	**153**
Depth:	1 ft below water								
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-SW38C -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1121								
Depth:	1 ft below water	**Clear**	**7.48**	**9.6**	**22.37**	**4.37**	**2.81**	**5.4**	**157**
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

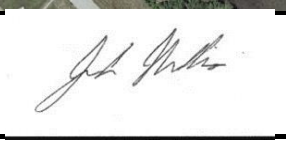
MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):



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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1127	**Clear**	**7.47**	**9.70**	**22.5**	**2.78**	**3.79**	**5.4**	**164**
Depth:	1 ft below water								
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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0855	**Clear**	**7.38**	**9.80**	**22.57**	**5.59**	**3.08**	**5.5**	**165**
Depth:	1 ft below water								
Method:	Grab								

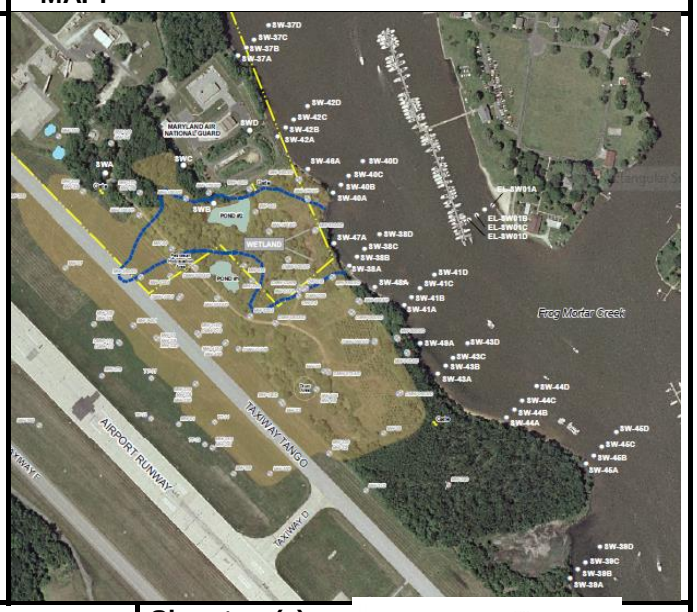
SAMPLE COLLECTION INFORMATION:

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-SW39B -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0900	**Clear**	**7.32**	**9.80**	**22.4**	**8.51**	**2.49**	**5.5**	**160**
Depth:	1 ft below water								
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):

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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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0906	**Clear**	**7.28**	**9.80**	**22.7**	**6.51**	**2.83**	**5.5**	**165**
Depth:	1 ft below water								
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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0913	**Clear**	**7.31**	**9.8**	**22.8**	**5.39**	**3.22**	**5.6**	**168**
Depth:	1 ft below water								
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-SW40A -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1143	**Clear**	**7.55**	**9.60**	**22.27**	**3.89**	**3.80**	**5.4**	**148**
Depth:	1 ft below water								
Method:	Grab								

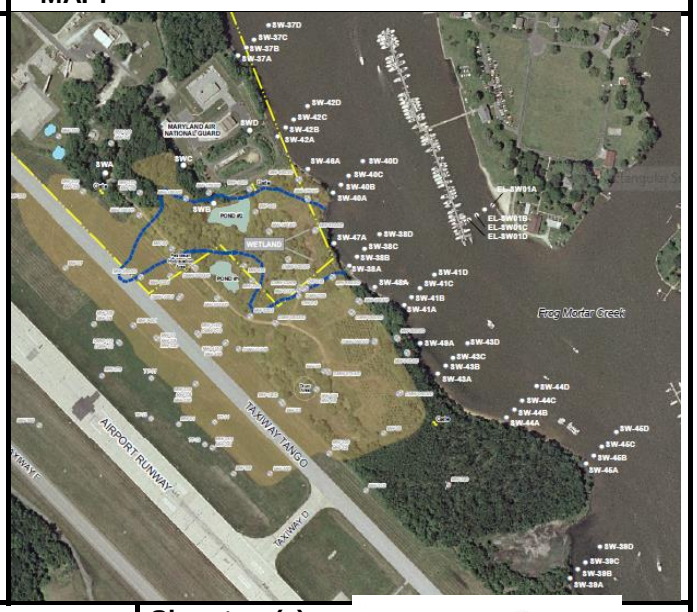
SAMPLE COLLECTION INFORMATION:

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-SW40B -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1147	**Clear**	**7.52**	**9.60**	**22.36**	**3.72**	**4.17**	**5.4**	**139**
Depth:	1 ft below water								
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-SW40C -92616
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:	9/26/2016								
Time:	1151	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.52**	**9.60**	**22.33**	**8.12**	**3.67**	**5.4**	**140**
Method:	Grab								

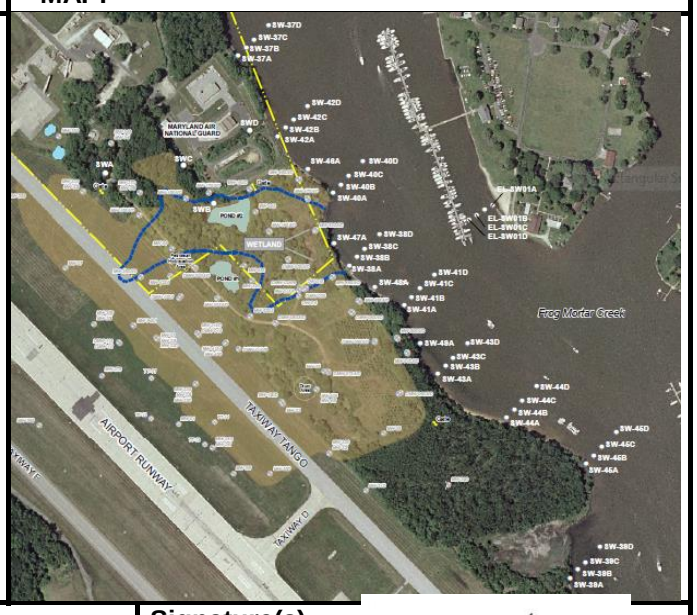
SAMPLE COLLECTION INFORMATION:

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-SW40D -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1157	**Clear**	**7.52**	**9.70**	**22.77**	**6.37**	**4.14**	**5.4**	**146**
Depth:	1 ft below water								
Method:	Grab								

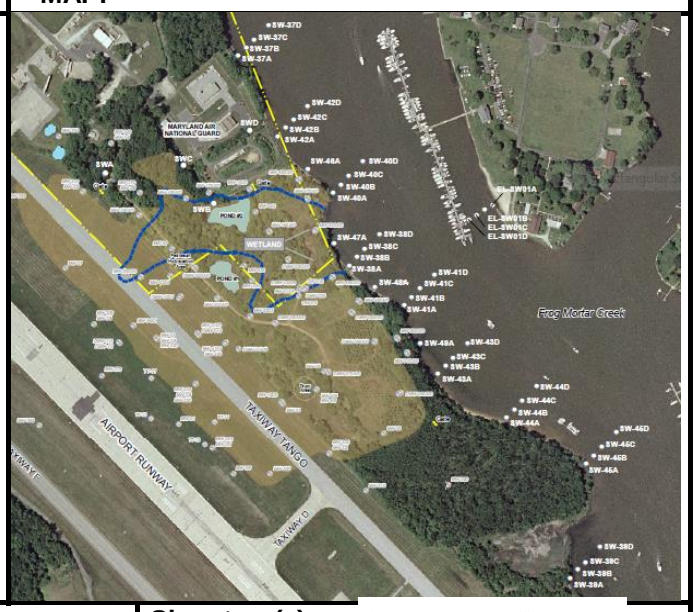
SAMPLE COLLECTION INFORMATION:

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1042	**Clear**	**7.36**	**9.70**	**22.37**	**3.81**	**2.88**	**5.4**	**138**
Depth:	1 ft below water								
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-SW41B -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1045	**Clear**	**7.34**	**9.70**	**22.50**	**3.20**	**3.21**	**5.4**	**132**
Depth:	1 ft below water								
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-SW41C -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1050	**Clear**	**7.34**	**9.70**	**22.56**	**3.14**	**2.97**	**5.5**	**137**
Depth:	1 ft below water								
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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1054	**Clear**	**7.43**	**9.80**	**22.86**	**3.17**	**4.43**	**5.5**	**163**
Depth:	1 ft below water								
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 -92616
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:	9/26/2016								
Time:	1215	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.57**	**9.50**	**22.42**	**6.29**	**3.00**	**5.3**	**130**
Method:	Grab								

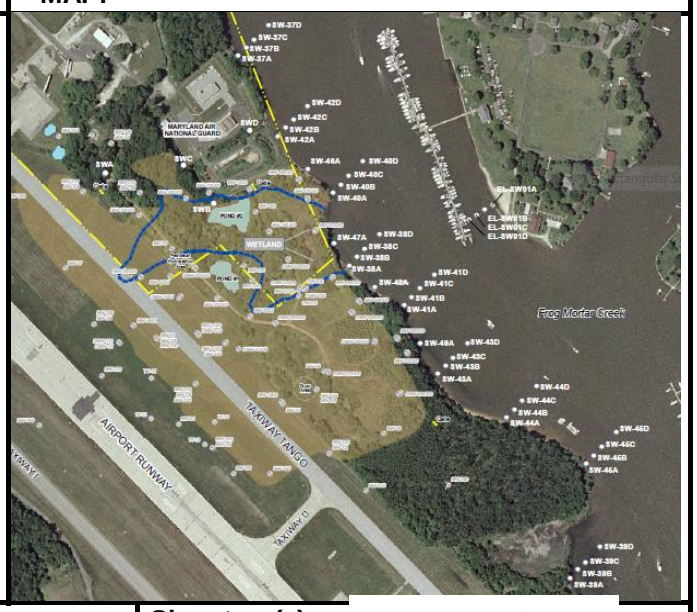
SAMPLE COLLECTION INFORMATION:

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-SW42B -92616
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:	9/26/2016								
Time:	1220	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.49**	**9.50**	**22.43**	**5.22**	**3.96**	**5.3**	**130**
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-SW42C -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1224	**Clear**	**7.49**	**9.60**	**22.39**	**5.68**	**3.47**	**5.4**	**141**
Depth:	1 ft below water								
Method:	Grab								

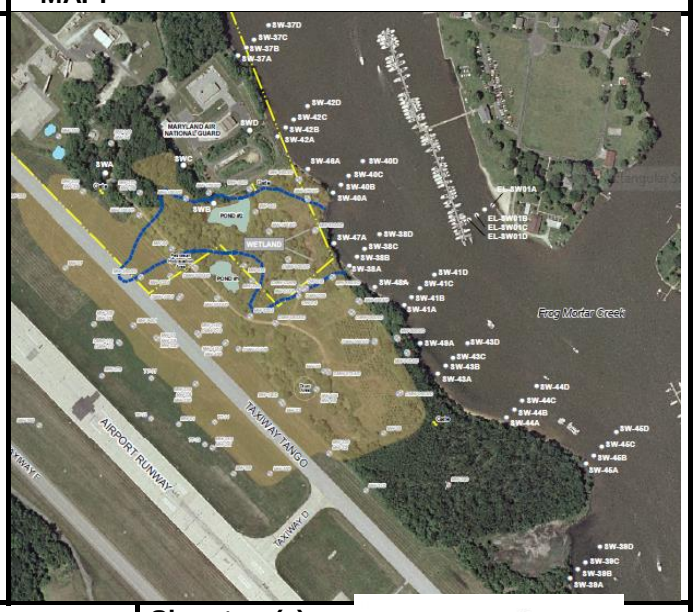
SAMPLE COLLECTION INFORMATION:

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

Page___ of ___

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 -92616
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:	9/26/2016								
Time:	1228	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.54**	**9.60**	**22.39**	**5.71**	**4.14**	**5.4**	**150**
Method:	Grab								

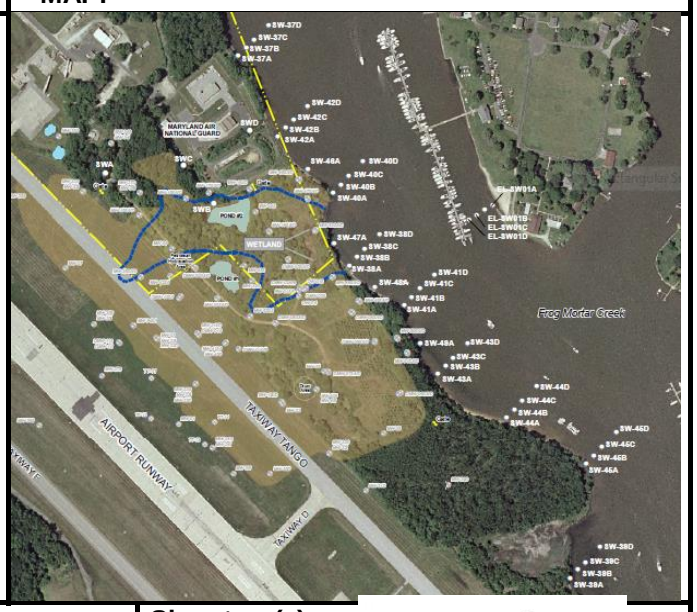
SAMPLE COLLECTION INFORMATION:

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 1.7 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-SW43A -92616
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:	9/26/2016								
Time:	1014	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.49**	**9.70**	**22.46**	**2.26**	**4.45**	**5.4**	**187**
Method:	Grab								

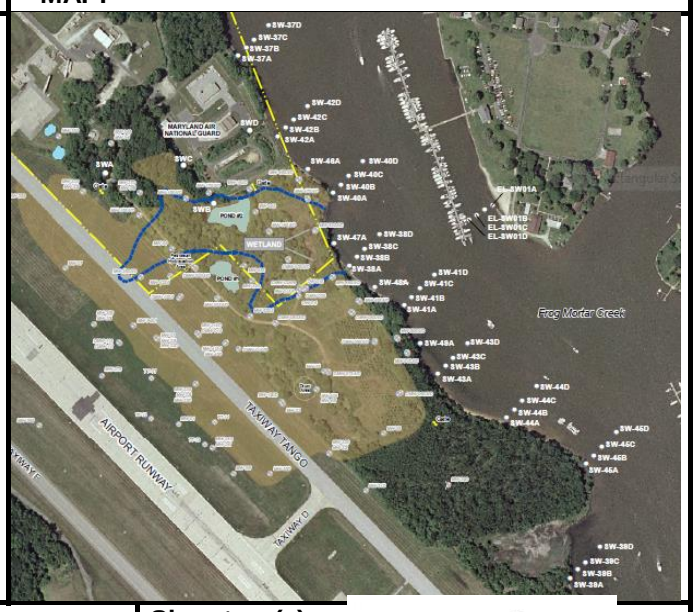
SAMPLE COLLECTION INFORMATION:

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 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-SW43B -92616
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:	9/26/2016								
Time:	1018	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.45**	**9.70**	**22.44**	**5.12**	**4.06**	**5.5**	**178**
Method:	Grab								

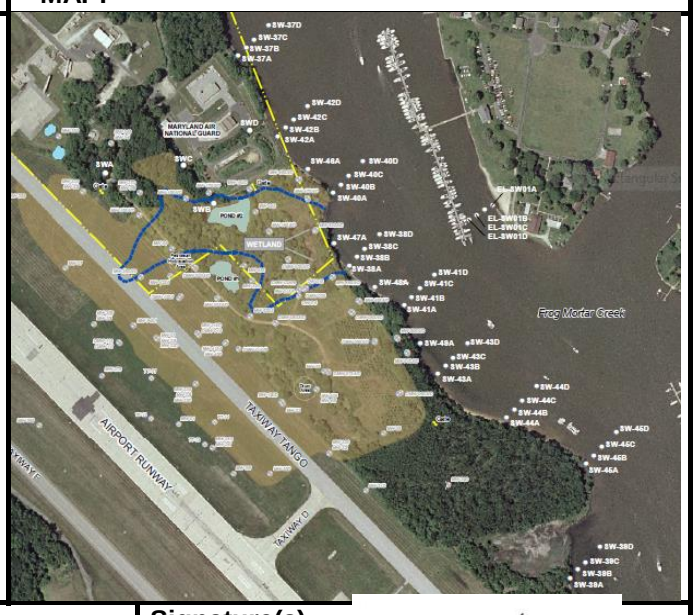
SAMPLE COLLECTION INFORMATION:

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 1.5 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-SW43C -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1022	**Clear**	**7.50**	**9.80**	**22.53**	**5.01**	**4.50**	**5.5**	**189**
Depth:	1 ft below water								
Method:	Grab								

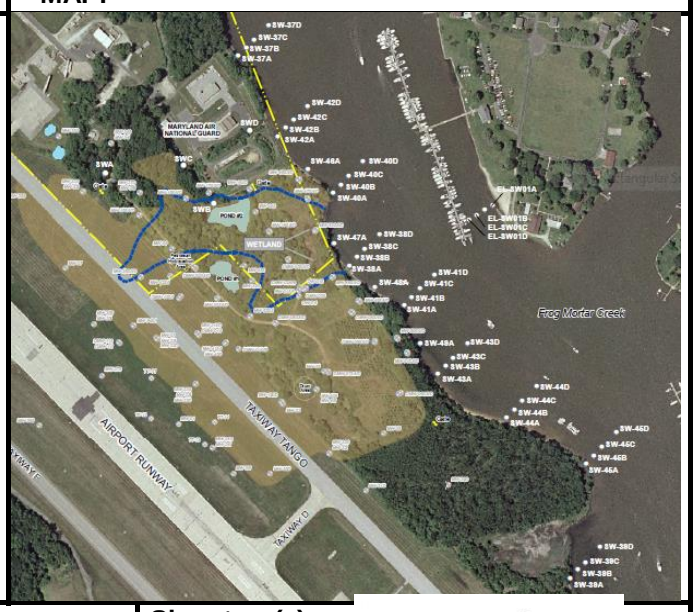
SAMPLE COLLECTION INFORMATION:

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

Page___ of ___

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1026	**Clear**	**7.52**	**9.80**	**22.70**	**3.65**	**3.79**	**5.5**	**196**
Depth:	1 ft below water								
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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0948	**Clear**	**7.47**	**9.70**	**22.36**	**2.76**	**3.84**	**5.4**	**191**
Depth:	1 ft below water								
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-SW44B -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0954	**Clear**	**7.42**	**9.70**	**22.41**	**2.03**	**3.59**	**5.4**	**180**
Depth:	1 ft below water								
Method:	Grab								

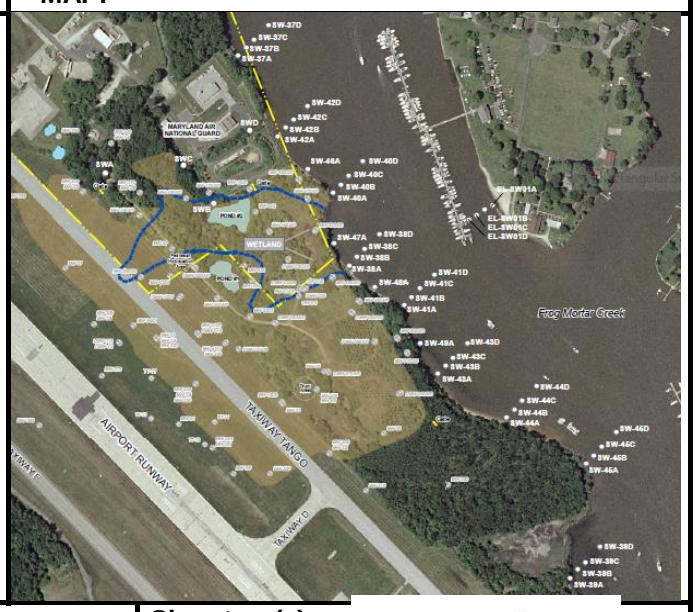
SAMPLE COLLECTION INFORMATION:

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

Page___ of ___

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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0957	**Clear**	**7.42**	**9.80**	**22.70**	**3.05**	**3.70**	**5.5**	**183**
Depth:	1 ft below water								
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-SW44D -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1007	**Clear**	**7.51**	**9.80**	**23.01**	**5.97**	**4.43**	**5.5**	**199**
Depth:	1 ft below water								
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 -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0923	**Clear**	**7.46**	**9.80**	**22.35**	**3.49**	**3.30**	**5.5**	**166**
Depth:	1 ft below water								
Method:	Grab								

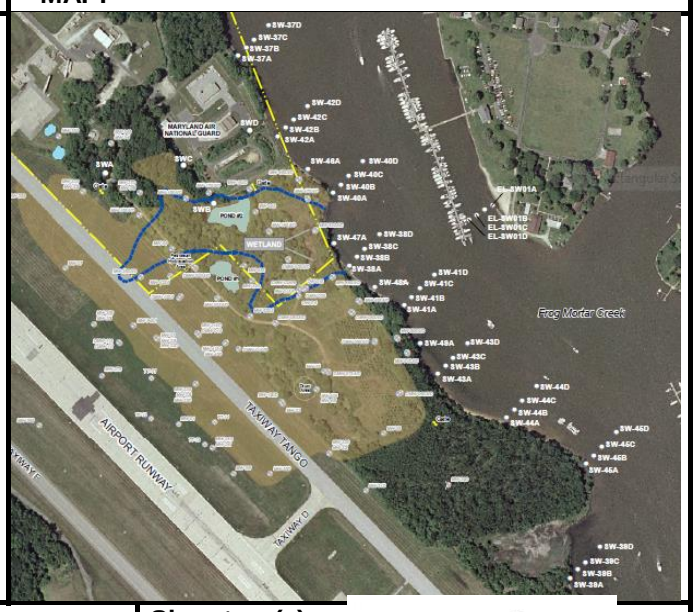
SAMPLE COLLECTION INFORMATION:

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 0.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

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 -92616
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:	9/26/2016								
Time:	0930	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.49**	**9.70**	**22.96**	**7.50**	**4.60**	**5.5**	**182**
Method:	Grab								

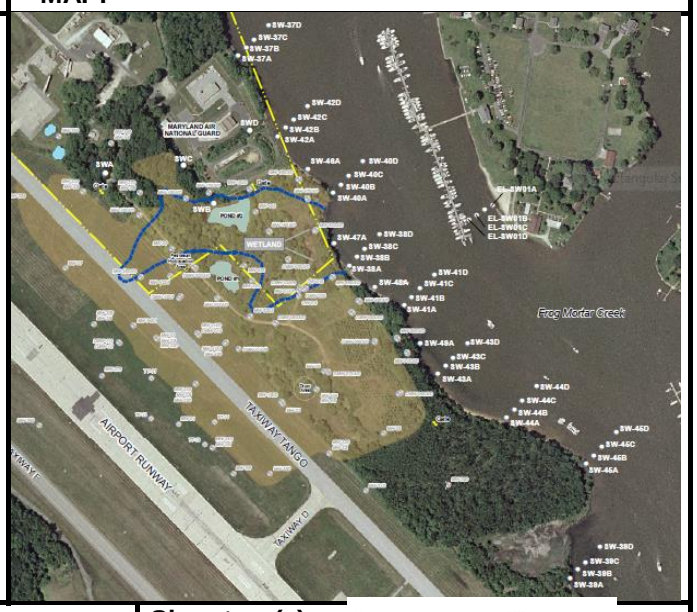
SAMPLE COLLECTION INFORMATION:

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-SW45C -92616
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:	9/26/2016								
Time:	0936	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**8.88**	**9.80**	**23.06**	**6.00**	**4.44**	**5.5**	**197**
Method:	Grab								

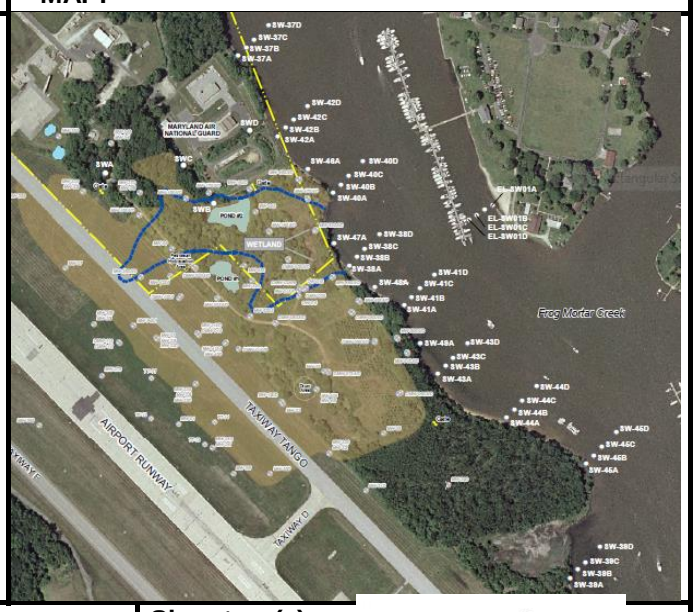
SAMPLE COLLECTION INFORMATION:

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 -92616
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:	9/26/2016								
Time:	0941	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**Clear**	**7.51**	**9.90**	**23.10**	**8.21**	**4.46**	**5.5**	**198**
Method:	Grab								

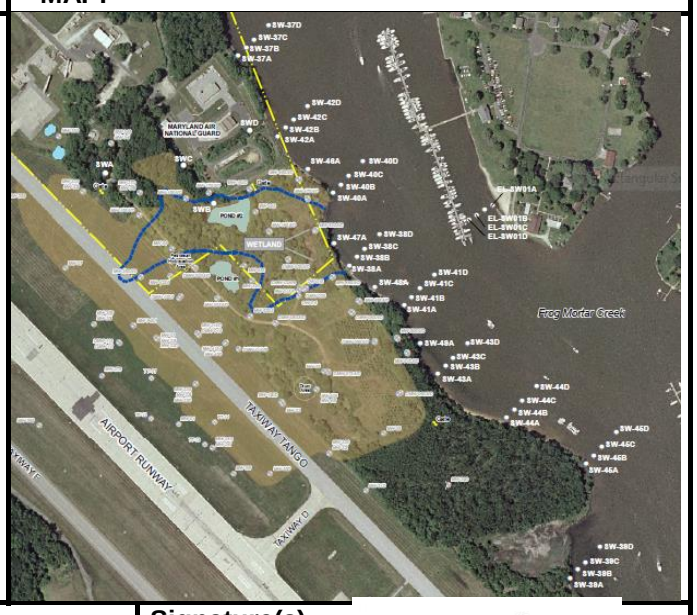
SAMPLE COLLECTION INFORMATION:

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-SW46A -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1211	**Clear**	**7.54**	**9.50**	**22.50**	**5.14**	**3.01**	**5.4**	**127**
Depth:	1 ft below water								
Method:	Grab								

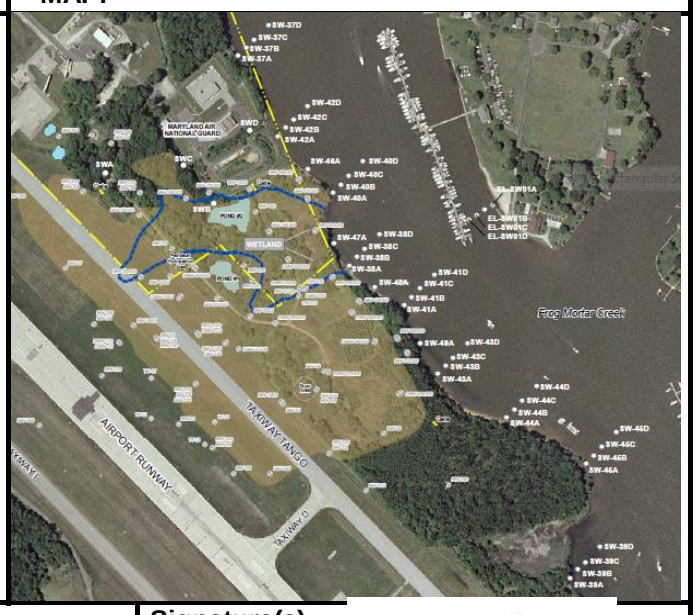
SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.7 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-SW47A -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1138	**Clear**	**7.56**	**9.60**	**22.27**	**4.91**	**3.92**	**5.4**	**155**
Depth:	1 ft below water								
Method:	Grab								

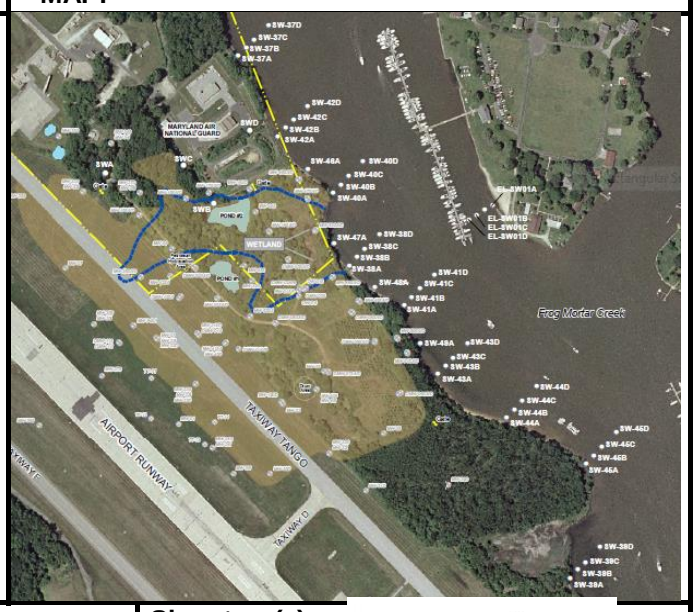
SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.6 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-SW48A -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1103	**Clear**	**7.75**	**9.60**	**22.45**	**5.41**	**2.61**	**5.4**	**108**
Depth:	1 ft below water								
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.: MSA-SW49A -92616
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:	9/26/2016	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1037	**Clear**	**7.42**	**9.70**	**22.26**	**3.30**	**2.57**	**5.4**	**151**
Depth:	1 ft below water								
Method:	Grab								

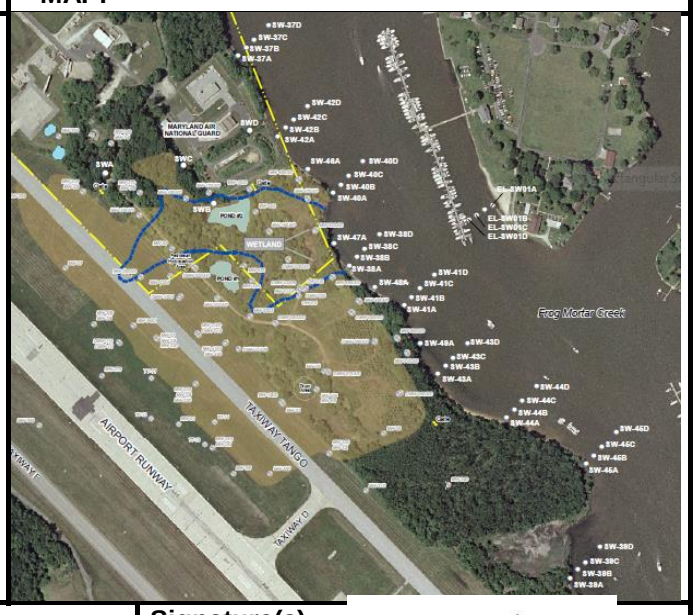
SAMPLE COLLECTION INFORMATION:

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):

APPENDIX B—DATA-VALIDATION REPORTS

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **NOVEMBER 14, 2016**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION – VOC/ METALS/ HARDNESS**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
SURFACE WATER SAMPLING
SAMPLE DELIVERY GROUP (SDG) 240-70005-1

SAMPLES: 45/Aqueous/

EL-SW01A-092616	EL-SW01B-092616	EL-SW01C-092616
EL-SW01D-092616	MSA-SW37A-092616	MSA-SW37B-092616
MSA-SW37C-092616	MSA-SW37D-092616	MSA-SW38A-092616
MSA-SW38B-092616	MSA-SW38C-092616	MSA-SW38D-092616
MSA-SW39A-092616	MSA-SW39B-092616	MSA-SW39C-092616
MSA-SW39D-092616	MSA-SW40A-092616	MSA-SW40B-092616
MSA-SW40C-092616	MSA-SW40D-092616	MSA-SW41A-092616
MSA-SW41B-092616	MSA-SW41C-092616	MSA-SW41D-092616
MSA-SW42A-092616	MSA-SW42B-092616	MSA-SW42C-092616
MSA-SW42D-092616	MSA-SW43A-092616	MSA-SW43B-092616
MSA-SW43C-092616	MSA-SW43D-092616	MSA-SW44A-092616
MSA-SW44B-092616	MSA-SW44C-092616	MSA-SW44D-092616
MSA-SW45A-092616	MSA-SW45B-092616	MSA-SW45C-092616
MSA-SW45D-092616	MSA-SW46A-092616	MSA-SW47A-092616
MSA-SW48A-092616	MSA-SW49A-092616	TB-092616

Overview

The sample set for LMC-MSA, SDG 240-70005-1 consisted of forty-four (44) aqueous environmental samples and one (1) trip blank. All aqueous environmental samples were analyzed for volatile organic compounds (VOC). All samples, except EL-SW01A-092616, EL-SW01B-092616, EL-SW01C-092616, EL-SW01D-092616, MSA-SW46A-092616, MSA-SW47A-092616, MSA-SW48A-092616, and MSA-SW49A-092616, were also analyzed for 1,1,2-trichlorotrifluoroethane, chlorodifluoromethane, metals and hardness. The trip blank was only analyzed for VOC. No field duplicate sample pairs were included in this SDG.

The samples were collected by Tetra Tech, Inc. on September 26, 2016 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with analytical and reporting protocols for SW846 Methods 8260C for VOC, 6020/7470A for metals, and 2340B for hardness.

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

Major

- As stated in the case narrative, 2-chloroethyl vinyl ether cannot be reliably recovered in acid preserved samples. Because the environmental samples were preserved in acid, the recovery of this compound is unreliable. The non-detected results reported for 2-chloroethyl vinyl ether in all samples were rejected, (UR).

- Tentatively Identified Compounds (TICs) were detected in several samples. The TICs identified as containing silanol compounds were rejected, (R), because these compounds are indicative of analytical column bleed and are not related to site contamination.

Minor

- A tentatively identified compound (TIC) search was performed for the compound chlorodifluoromethane. 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 considered to be an estimated limit. The non-detected results reported for chlorodifluoromethane were qualified as estimated, (UJ).

- A TIC was detected in sample MSA-SW38D-092616. The GC/MS instrument was not calibrated for the TIC; therefore, the compound was qualified as estimated presumptively present, (NJ).

- VOC continuing calibration percent difference (%D) was greater than quality control (QC) limits (20%) on 10/06/2016 @ 16:12 for 1,1,2-trichloro-trifluoroethane, tert-butyl alcohol, bromoform, 1,2,3-trichloropropane, and 1,2-dibromo-3-chloropropane affecting analytical batch 250232. All results for these parameters in the affected samples were nondetect and were qualified as estimated (UJ).

- VOC continuing calibration %D was greater than QC limits (20%) on 10/09/2016 @ 12:11 for bromomethane and trichlorofluoromethane affecting analytical batch 250510. All results for these parameters in the affected samples were nondetect and were qualified as estimated (UJ).

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

Analyte	Maximum Concentration (ug/L)	Reporting Limit (RL) (> or <)
Antimony(1)	0.342	<
Barium(1)	1.86	<
Chromium(1)	0.676	<
Copper(1)	0.96	<
Lead(1)	0.31	<
Selenium(1)	2.2	<
Zinc((1)	20.5	>
Beryllium(2)	0.07	<
Cobalt(2)	0.041	<
Lead(3)	0.15	<

1. Concentration in method blank 240-248806/1-A affecting samples in preparation batch 248806.
2. Maximum concentration in continuing calibration blank on 10/13/2016 at 20:12 affecting samples MSA-SW37A-092616, MSA-SW37B-092616, MSA-SW37C-092616, MSA-SW37D-092616, MSA-SW38A-092616, MSA-SW38B-092616, MSA-SW44A-092616, MSA-SW44B-092616, MSA-SW44C-092616, MSA-SW44D-092616, MSA-SW45A-092616, MSA-SW45B-092616, MSA-SW45C-092616, and MSA-SW45D-092616.
3. Maximum concentration in continuing calibration blanks on 10/13/2016 at 18:29, 19:21, 20:12, 21:04, and 22:21 affecting all samples.

Dilution factor, if applicable, was taken into consideration when evaluating for blank contamination. Detected results reported below the RL were qualified as non-detected, (U), due

to blank contamination.

- Detected results reported below the RL limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

All samples were analyzed at a 5X dilution for metals analysis.

Hexachlorobutadiene was detected in the VOC method blank 240-250232/7 at a concentration of 0.428 ug/L. No action was taken as all sample results were nondetect.

TICs (1,3,5-trichlorobenzene and 2-methylnaphthalene) were detected in a VOC method blank (MB 240-250386-6).

VOC laboratory control sample (LCS) (LCS 240-250232/4) percent recovery (%R) was greater than QC limits for 1,2,3-trichloropropane and 1,2-dibromo-3-chloropropane. No action was taken as results for these parameters were nondetect.

Insufficient sample volume was available to perform matrix spike/matrix spike duplicates associated with VOC analytical batches 140-250232, 240-250386, and 240-250510.

Metal LCS %R was greater than QC limits for beryllium. No action was taken as all results for beryllium were nondetect.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Non-detected chlorodifluoromethane results were estimated because detection was evaluated via TIC library search. One TIC was detected in sample MSA-SW38D-092616. Calibration noncompliance was noted for VOCs. Hexachlorobutadiene and metals were present in laboratory preparation and method blanks.

Other Factors Affecting Data Quality: Because samples were preserved in acid, the recovery of 2-chloroethyl vinyl ether is unreliable.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (September 2016) and the "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.
Leanne M. Ganser
Environmental Scientist/Data Validator

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

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

Appendix A

Qualified Analytical Results

Qualifier Codes:

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

PROJ_NO: 07804	NSAMPLE	EL-SW01A-092616			EL-SW01B-092616			EL-SW01C-092616			EL-SW01D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-41			240-70005-42			240-70005-43			240-70005-44		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		0.94	U		0.94	J	P	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	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-SW37A-092616			MSA-SW37B-092616			MSA-SW37C-092616			MSA-SW37D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-1			240-70005-2			240-70005-3			240-70005-4		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	C	0.45	UJ	C	0.45	UJ	C	0.45	UJ	C
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	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C
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	UJ	C	0.82	UJ	C	0.82	UJ	C	0.82	UJ	C
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		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	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-5			240-70005-6			240-70005-7			240-70005-8		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	C	0.45	UJ	C	0.45	UJ	C	0.45	UJ	C
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	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C
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	UJ	C	0.82	UJ	C	0.82	UJ	C	0.82	UJ	C
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		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	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-092616			MSA-SW39B-092616			MSA-SW39C-092616			MSA-SW39D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-9			240-70005-10			240-70005-11			240-70005-12		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	C	0.45	UJ	C	0.45	UJ	C	0.45	UJ	C
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	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C
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	UJ	C	0.82	UJ	C	0.82	UJ	C	0.82	UJ	C
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		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	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-13			240-70005-14			240-70005-15			240-70005-16		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	C	0.45	UJ	C	0.45	UJ	C	0.45	UJ	C
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	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C
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	UJ	C	0.82	UJ	C	0.82	UJ	C	0.82	UJ	C
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		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	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW41D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-17			240-70005-18			240-70005-19			240-70005-20		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	C	0.45	UJ	C	0.45	UJ	C	0.45	UJ	C
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	UJ	C	0.44	UJ	C	0.44	UJ	C	0.44	UJ	C
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	UJ	C	0.82	UJ	C	0.82	UJ	C	0.82	UJ	C
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		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	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-092616			MSA-SW42B-092616			MSA-SW42C-092616			MSA-SW42D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-21			240-70005-22			240-70005-23			240-70005-24		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		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	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-092616			MSA-SW43B-092616			MSA-SW43C-092616			MSA-SW43D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-25			240-70005-26			240-70005-27			240-70005-28		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		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	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-092616			MSA-SW44B-092616			MSA-SW44C-092616			MSA-SW44D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-29			240-70005-30			240-70005-31			240-70005-32		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		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	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-092616			MSA-SW45B-092616			MSA-SW45C-092616			MSA-SW45D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-33			240-70005-34			240-70005-35			240-70005-36		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		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	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW46A-092616			MSA-SW47A-092616			MSA-SW48A-092616			MSA-SW49A-092616		
SDG: 240-70005-1	LAB_ID	240-70005-37			240-70005-38			240-70005-39			240-70005-40		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		0.4	J	P	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		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	U		0.56	U		0.56	U		0.56	U	
BROMOMETHANE		0.44	U		0.44	U		0.44	U		0.44	U	

PROJ_NO: 07804	NSAMPLE	TB-092616		
SDG: 240-70005-1	LAB_ID	240-70005-45		
FRACTION: OV	SAMP_DATE	9/26/2016		
MEDIA: WATER	QC_TYPE	TB		
	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	U	
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	U	
BROMOMETHANE		0.44	UJ	C

PROJ_NO: 07804	NSAMPLE	EL-SW01A-092616			EL-SW01B-092616			EL-SW01C-092616			EL-SW01D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-41			240-70005-42			240-70005-43			240-70005-44		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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													
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		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	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	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		0.31	J	P	0.28	J	P	0.3	J	P	0.25	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-092616			MSA-SW37B-092616			MSA-SW37C-092616			MSA-SW37D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-1			240-70005-2			240-70005-3			240-70005-4		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		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	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		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-5			240-70005-6			240-70005-7			240-70005-8		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		7.6			4.2			2.6			1		
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		5.5			4			3.9			1.5		

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-092616			MSA-SW39B-092616			MSA-SW39C-092616			MSA-SW39D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-9			240-70005-10			240-70005-11			240-70005-12		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		0.26	U		0.29	J	P	0.26	J	P	0.27	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		0.23	J	P	0.33	J	P	0.29	J	P	0.28	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-13			240-70005-14			240-70005-15			240-70005-16		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		1.9			2.2			6.7			1.2		
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		2.9			4.2			18			2.3		

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW41D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-17			240-70005-18			240-70005-19			240-70005-20		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		5.7			3.9			1.6			0.58	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		0.25	J	P	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		4.2			3.3			1.5			0.75	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-092616			MSA-SW42B-092616			MSA-SW42C-092616			MSA-SW42D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-21			240-70005-22			240-70005-23			240-70005-24		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		0.71	J	P	0.99	J	P	0.72	J	P	0.38	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	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		0.23	J	P	0.23	J	P	0.25	J	P	0.3	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-092616			MSA-SW43B-092616			MSA-SW43C-092616			MSA-SW43D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-25			240-70005-26			240-70005-27			240-70005-28		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		2.3			1.7			0.78	J	P	0.84	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	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		1.7			1.3			0.69	J	P	0.79	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-092616			MSA-SW44B-092616			MSA-SW44C-092616			MSA-SW44D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-29			240-70005-30			240-70005-31			240-70005-32		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		1.5			2.1			0.52	J	P	0.33	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	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		1.2			1.6			0.54	J	P	0.38	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-092616			MSA-SW45B-092616			MSA-SW45C-092616			MSA-SW45D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-33			240-70005-34			240-70005-35			240-70005-36		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	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		0.34	J	P	0.28	J	P	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	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	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		0.43	J	P	0.33	J	P	0.26	J	P	0.28	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW46A-092616			MSA-SW47A-092616			MSA-SW48A-092616			MSA-SW49A-092616		
SDG: 240-70005-1	LAB_ID	240-70005-37			240-70005-38			240-70005-39			240-70005-40		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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													
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		0.54	J	P	2.7			5.3			4.5		
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		1.5	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	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		1.8	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		0.22	J	P	4.5			3.8			3.6		

PROJ_NO: 07804	NSAMPLE	TB-092616		
SDG: 240-70005-1	LAB_ID	240-70005-45		
FRACTION: OV	SAMP_DATE	9/26/2016		
MEDIA: WATER	QC_TYPE	TB		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON DISULFIDE		0.38	U	
CARBON TETRACHLORIDE		0.43	U	
CHLOROBENZENE		0.25	U	
CHLORODIBROMOMETHANE		0.43	U	
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	U	
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-092616			EL-SW01B-092616			EL-SW01C-092616			EL-SW01D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-41			240-70005-42			240-70005-43			240-70005-44		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	U		0.29	U		0.29	U		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-092616			MSA-SW37B-092616			MSA-SW37C-092616			MSA-SW37D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-1			240-70005-2			240-70005-3			240-70005-4		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-5			240-70005-6			240-70005-7			240-70005-8		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		4.5			2.7			1.2			0.38	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-092616			MSA-SW39B-092616			MSA-SW39C-092616			MSA-SW39D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-9			240-70005-10			240-70005-11			240-70005-12		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-13			240-70005-14			240-70005-15			240-70005-16		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		0.77			0.83			2.1			0.39	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW41D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-17			240-70005-18			240-70005-19			240-70005-20		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		2.8			1.7			0.7			0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-092616			MSA-SW42B-092616			MSA-SW42C-092616			MSA-SW42D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-21			240-70005-22			240-70005-23			240-70005-24		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		0.96			1.6			1.1			0.34	J	P

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-092616			MSA-SW43B-092616			MSA-SW43C-092616			MSA-SW43D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-25			240-70005-26			240-70005-27			240-70005-28		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		0.52			0.36	J	P	0.29	U		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-092616			MSA-SW44B-092616			MSA-SW44C-092616			MSA-SW44D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-29			240-70005-30			240-70005-31			240-70005-32		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		0.42	J	P	0.55			0.29	U		0.29	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-092616			MSA-SW45B-092616			MSA-SW45C-092616			MSA-SW45D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-33			240-70005-34			240-70005-35			240-70005-36		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-092616			MSA-SW47A-092616			MSA-SW48A-092616			MSA-SW49A-092616		
SDG: 240-70005-1	LAB_ID	240-70005-37			240-70005-38			240-70005-39			240-70005-40		
FRACTION: OV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		0.65			1.1			3.3			2.1		

PROJ_NO: 07804	NSAMPLE	TB-092616		
SDG: 240-70005-1	LAB_ID	240-70005-45		
FRACTION: OV	SAMP_DATE	9/26/2016		
MEDIA: WATER	QC_TYPE	TB		
	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-SW37A-092616			MSA-SW37B-092616			MSA-SW37C-092616			MSA-SW37D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-1			240-70005-2			240-70005-3			240-70005-4		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		1.9	J	P	2.4	J	P	2.2	J	P	2.4	J	P
BARIUM		52			55			52			57		
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	J	P
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		3.9	J	P	4.5	J	P	4.9	J	P	5.8	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		3	J	P	3.1	J	P	3	J	P	3.2	J	P
NICKEL		2.1	J	P	2.8	J	P	3	J	P	3	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-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-5			240-70005-6			240-70005-7			240-70005-8		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		1.9	J	P	1.8	J	P	1.8	J	P	2	J	P
BARIUM		53			50			52			53		
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		0.89	U	A	0.65	U		0.65	U		0.65	U	
COPPER		3.1	J	P	3.3	J	P	3.4	J	P	4.3	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		2.7	J	P	2.7	J	P	2.8	J	P	2.9	J	P
NICKEL		2.9	J	P	2.8	J	P	2.8	J	P	2.6	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		370		

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-092616			MSA-SW39B-092616			MSA-SW39C-092616			MSA-SW39D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-9			240-70005-10			240-70005-11			240-70005-12		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	U		1.8	U		1.8	U		1.8	J	P
BARIUM		53			54			56			54		
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		1.9	J	P
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		3.6	J	P	7.3	J	P	3.2	J	P	4.1	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		2.8	J	P	2.9	J	P	2.7	J	P	2.9	J	P
NICKEL		2.5	J	P	3.4	J	P	2.8	J	P	3.5	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		39	J	P	31	U		31	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-13			240-70005-14			240-70005-15			240-70005-16		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	J	P	1.8	J	P	2.1	J	P	2	J	P
BARIUM		57			55			57			54		
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		1	J	P	0.65	U	
COPPER		4.1	J	P	4.1	J	P	4.4	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		3	J	P	2.8	J	P	2.8	J	P	2.8	J	P
NICKEL		3.1	J	P	3.3	J	P	3.1	J	P	2.9	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-SW41A-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW41D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-17			240-70005-18			240-70005-19			240-70005-20		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	U		1.8	U		1.8	J	P	1.9	J	P
BARIUM		53			52			54			53		
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		3.7	J	P	3.6	J	P	4.2	J	P	5.5	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		2.8	J	P	2.7	J	P	2.7	J	P	2.7	J	P
NICKEL		2.4	J	P	2.2	J	P	2.3	J	P	2.6	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-SW42A-092616			MSA-SW42B-092616			MSA-SW42C-092616			MSA-SW42D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-21			240-70005-22			240-70005-23			240-70005-24		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		2.9	J	P	2.5	J	P	1.8	U		1.8	J	P
BARIUM		64			61			55			55		
BERYLLIUM		2	U		2	U		2	U		2	U	
CADMIUM		1.6	U		1.6	U		1.6	U		1.6	U	
CHROMIUM		1.6	U	A	1.7	U	A	1.3	U		1.3	U	
COBALT		0.99	J	P	0.8	J	P	0.65	U		0.65	U	
COPPER		4.5	U	A	4.4	U	A	3.9	U	A	4.1	U	A
LEAD		1	U	A	0.8	U		0.8	U		0.8	U	
MERCURY		0.09	U		0.09	U		0.09	U		0.09	U	
MOLYBDENUM		4	J	P	3.2	J	P	2.7	J	P	2.9	J	P
NICKEL		3.5	J	P	3.6	J	P	2.8	J	P	2.6	J	P
SELENIUM		2.9	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-SW43A-092616			MSA-SW43B-092616			MSA-SW43C-092616			MSA-SW43D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-25			240-70005-26			240-70005-27			240-70005-28		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	U		1.9	J	P	1.9	J	P	2	J	P
BARIUM		58			57			57			58		
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		5.5	U	A	4.9	U	A	4.1	U	A	5.4	U	A
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		3.1	J	P	2.9	J	P	3.2	J	P	3	J	P
NICKEL		2.7	J	P	2.7	J	P	2.9	J	P	2.5	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-SW44A-092616			MSA-SW44B-092616			MSA-SW44C-092616			MSA-SW44D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-29			240-70005-30			240-70005-31			240-70005-32		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	U		1.8	U		1.9	J	P	1.8	J	P
BARIUM		52			56			56			54		
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		3.5	U	A	3.9	U	A	4.9	U	A	4.3	U	A
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		2.9	J	P	2.9	J	P	2.8	J	P	2.9	J	P
NICKEL		2.8	J	P	3.2	J	P	3.2	J	P	2.6	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		32	U	A

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-092616			MSA-SW45B-092616			MSA-SW45C-092616			MSA-SW45D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-33			240-70005-34			240-70005-35			240-70005-36		
FRACTION: M	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	U		1.8	J	P	1.9	J	P	2	J	P
BARIUM		56			52			57			56		
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		1.6	U	A	1.3	U		1.3	U	
COBALT		0.65	U		0.65	U		0.65	U		0.65	U	
COPPER		6	U	A	14			4.2	U	A	5.3	U	A
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		3	J	P	3	J	P	3	J	P	3	J	P
NICKEL		3.1	J	P	3	J	P	2.6	J	P	2.8	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-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-5			240-70005-6			240-70005-7			240-70005-8		
FRACTION: TICOV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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
ETHANETHIOAMIDE											2	NJ	Z1
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)													
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-													
SILANOL, TRIMETHYL-		2.1	R	Z2	2.2	R	Z2	2	R	Z2			
TERT-BUTYLDIMETHYLSILANOL													

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-13			240-70005-14			240-70005-15			240-70005-16		
FRACTION: TICOV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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
ETHANETHIOAMIDE													
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)											3.3	R	Z2
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-		2.9	R	Z2									
SILANOL, TRIMETHYL-								2.3	R	Z2			
TERT-BUTYLDIMETHYLSILANOL					2.4	R	Z2						

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW43D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-17			240-70005-18			240-70005-19			240-70005-28		
FRACTION: TICOV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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
ETHANETHIOAMIDE													
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)								2.8	R	Z2			
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-													
SILANOL, TRIMETHYL-		2.1	R	Z2	2.5	R	Z2				2.1	R	Z2
TERT-BUTYLDIMETHYLSILANOL													

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-092616			MSA-SW44B-092616			MSA-SW45B-092616			TB-092616		
SDG: 240-70005-1	LAB_ID	240-70005-29			240-70005-30			240-70005-34			240-70005-45		
FRACTION: TICOV	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			TB		
	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
ETHANETHIOAMIDE													
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)													
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-													
SILANOL, TRIMETHYL-		2.4	R	Z2	2.4	R	Z2	2.4	R	Z2			
TERT-BUTYLDIMETHYLSILANOL											2.1	R	Z2

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-092616			MSA-SW37B-092616			MSA-SW37C-092616			MSA-SW37D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-1			240-70005-2			240-70005-3			240-70005-4		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		200			210			210			220		
HARDNESS AS CACO3		1200			1300			1200			1300		
MAGNESIUM HARDNESS AS CACO3		1000			1000			1000			1100		

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-5			240-70005-6			240-70005-7			240-70005-8		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		210			210			210			210		
HARDNESS AS CACO3		1300			1200			1200			1300		
MAGNESIUM HARDNESS AS CACO3		1000			1000			1000			1100		

PROJ_NO: 07804	NSAMPLE	MSA-SW39A-092616			MSA-SW39B-092616			MSA-SW39C-092616			MSA-SW39D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-9			240-70005-10			240-70005-11			240-70005-12		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		210			210			210			220		
HARDNESS AS CACO3		1300			1300			1300			1300		
MAGNESIUM HARDNESS AS CACO3		1100			1000			1100			1100		

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-13			240-70005-14			240-70005-15			240-70005-16		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		220			220			220			210		
HARDNESS AS CACO3		1300			1300			1300			1300		
MAGNESIUM HARDNESS AS CACO3		1100			1100			1100			1100		

PROJ_NO: 07804	NSAMPLE	MSA-SW41A-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW41D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-17			240-70005-18			240-70005-19			240-70005-20		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		210			200			200			210		
HARDNESS AS CACO3		1200			1200			1200			1300		
MAGNESIUM HARDNESS AS CACO3		1000			1000			1000			1000		

PROJ_NO: 07804	NSAMPLE	MSA-SW42A-092616			MSA-SW42B-092616			MSA-SW42C-092616			MSA-SW42D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-21			240-70005-22			240-70005-23			240-70005-24		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		230			230			210			210		
HARDNESS AS CACO3		1400			1400			1300			1300		
MAGNESIUM HARDNESS AS CACO3		1100			1100			1000			1000		

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-092616			MSA-SW43B-092616			MSA-SW43C-092616			MSA-SW43D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-25			240-70005-26			240-70005-27			240-70005-28		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		230			230			230			230		
HARDNESS AS CACO3		1400			1400			1400			1400		
MAGNESIUM HARDNESS AS CACO3		1100			1200			1100			1100		

PROJ_NO: 07804	NSAMPLE	MSA-SW44A-092616			MSA-SW44B-092616			MSA-SW44C-092616			MSA-SW44D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-29			240-70005-30			240-70005-31			240-70005-32		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		210			220			220			210		
HARDNESS AS CACO3		1300			1300			1300			1300		
MAGNESIUM HARDNESS AS CACO3		1100			1100			1100			1100		

PROJ_NO: 07804	NSAMPLE	MSA-SW45A-092616			MSA-SW45B-092616			MSA-SW45C-092616			MSA-SW45D-092616		
SDG: 240-70005-1	LAB_ID	240-70005-33			240-70005-34			240-70005-35			240-70005-36		
FRACTION: MISC	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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		220			210			220			220		
HARDNESS AS CACO3		1300			1300			1300			1300		
MAGNESIUM HARDNESS AS CACO3		1100			1100			1100			1100		

Appendix B

Results as Reported by the Laboratory

Client Sample ID: **MSA-SW37A-092616**

Lab Sample ID: 240-70005-1 Date Sampled: 09/26/2016 1242
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8436.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1808			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1808				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37A-092616**

Lab Sample ID: 240-70005-1 Date Sampled: 09/26/2016 1242
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8436.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1808			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1808				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	94		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	100		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37A-092616**

Lab Sample ID: 240-70005-1 Date Sampled: 09/26/2016 1242
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8436.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1808			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1808				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37B-092616**

Lab Sample ID: 240-70005-2 Date Sampled: 09/26/2016 1247
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8437.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1831			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1831				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37B-092616**

Lab Sample ID: 240-70005-2 Date Sampled: 09/26/2016 1247
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8437.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1831			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1831				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	95		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	103		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37B-092616**

Lab Sample ID: 240-70005-2 Date Sampled: 09/26/2016 1247
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8437.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1831			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1831				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37C-092616**

Lab Sample ID: 240-70005-3 Date Sampled: 09/26/2016 1251
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8438.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1854			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1854				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37C-092616**

Lab Sample ID: 240-70005-3 Date Sampled: 09/26/2016 1251
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8438.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1854			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1854				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		63 - 132
4-Bromofluorobenzene (Surr)	92		73 - 120
Toluene-d8 (Surr)	91		73 - 124
Dibromofluoromethane (Surr)	98		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37C-092616**

Lab Sample ID: 240-70005-3 Date Sampled: 09/26/2016 1251
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8438.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1854			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1854				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37D-092616**

Lab Sample ID: 240-70005-4 Date Sampled: 09/26/2016 1256
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8439.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1917			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1917				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37D-092616**

Lab Sample ID: 240-70005-4 Date Sampled: 09/26/2016 1256
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8439.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1917			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1917				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	93		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37D-092616**

Lab Sample ID: 240-70005-4 Date Sampled: 09/26/2016 1256
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8439.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1917			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1917				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38A-092616**

Lab Sample ID: 240-70005-5 Date Sampled: 09/26/2016 1109
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8440.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1940			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1940				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	0.33	J	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	7.6		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38A-092616**

Lab Sample ID: 240-70005-5 Date Sampled: 09/26/2016 1109
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8440.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1940			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1940				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	5.5		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	4.5		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	95		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38A-092616**

Lab Sample ID: 240-70005-5 Date Sampled: 09/26/2016 1109
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8440.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 1940			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 1940				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.1	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38B-092616**

Lab Sample ID: 240-70005-6 Date Sampled: 09/26/2016 1115
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8441.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2004			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2004				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	4.2		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38B-092616**

Lab Sample ID: 240-70005-6 Date Sampled: 09/26/2016 1115
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8441.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2004			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2004				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	4.0		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	2.7		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	93		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38B-092616**

Lab Sample ID: 240-70005-6 Date Sampled: 09/26/2016 1115
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8441.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2004			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2004				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.2	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW38C-092616**

Lab Sample ID: 240-70005-7 Date Sampled: 09/26/2016 1121
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8442.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2027			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2027				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	2.6		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38C-092616**

Lab Sample ID: 240-70005-7 Date Sampled: 09/26/2016 1121
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8442.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2027			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2027				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	3.9		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	1.2		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38C-092616**

Lab Sample ID: 240-70005-7 Date Sampled: 09/26/2016 1121
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8442.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2027			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2027				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.0	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38D-092616**

Lab Sample ID: 240-70005-8 Date Sampled: 09/26/2016 1127
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8443.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2050			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2050				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38D-092616**

Lab Sample ID: 240-70005-8 Date Sampled: 09/26/2016 1127
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8443.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2050			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2050				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.5		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.38	J	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38D-092616**

Lab Sample ID: 240-70005-8 Date Sampled: 09/26/2016 1127
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8443.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2050			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2050				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
62-55-5	Ethanethioamide	4.13	2.0	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW39A-092616**

Lab Sample ID: 240-70005-9 Date Sampled: 09/26/2016 0855
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8444.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2113			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2113				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39A-092616**

Lab Sample ID: 240-70005-9 Date Sampled: 09/26/2016 0855
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8444.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2113			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2113				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.23	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39A-092616**

Lab Sample ID: 240-70005-9 Date Sampled: 09/26/2016 0855
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8444.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2113			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2113				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39B-092616**

Lab Sample ID: 240-70005-10 Date Sampled: 09/26/2016 0900
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8445.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2137			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2137				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.29	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39B-092616**

Lab Sample ID: 240-70005-10 Date Sampled: 09/26/2016 0900
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8445.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2137			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2137				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.33	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	93		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39B-092616**

Lab Sample ID: 240-70005-10 Date Sampled: 09/26/2016 0900
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8445.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2137			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2137				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW39C-092616**

Lab Sample ID: 240-70005-11 Date Sampled: 09/26/2016 0906
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8446.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2200			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.26	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39C-092616**

Lab Sample ID: 240-70005-11 Date Sampled: 09/26/2016 0906
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8446.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2200			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2200				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.29	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	91		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39C-092616**

Lab Sample ID: 240-70005-11 Date Sampled: 09/26/2016 0906
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8446.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2200			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2200				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39D-092616**

Lab Sample ID: 240-70005-12 Date Sampled: 09/26/2016 0913
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8447.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2223			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2223				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.27	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39D-092616**

Lab Sample ID: 240-70005-12 Date Sampled: 09/26/2016 0913
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8447.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2223			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2223				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.28	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39D-092616**

Lab Sample ID: 240-70005-12 Date Sampled: 09/26/2016 0913
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8447.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2223			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2223				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40A-092616**

Lab Sample ID: 240-70005-13 Date Sampled: 09/26/2016 1143
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8448.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2247			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2247				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.9		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40A-092616**

Lab Sample ID: 240-70005-13 Date Sampled: 09/26/2016 1143
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8448.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2247			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2247				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	2.9		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.77		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40A-092616**

Lab Sample ID: 240-70005-13 Date Sampled: 09/26/2016 1143
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8448.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2247			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2247				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)-	4.13	2.9	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40B-092616**

Lab Sample ID: 240-70005-14 Date Sampled: 09/26/2016 1147
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8449.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2310			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	2.2		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40B-092616**

Lab Sample ID: 240-70005-14 Date Sampled: 09/26/2016 1147
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8449.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2310			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	4.2		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.83		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	86		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40B-092616**

Lab Sample ID: 240-70005-14 Date Sampled: 09/26/2016 1147
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8449.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2310			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2310				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
18173-64-3	tert-Butyldimethylsilanol	4.13	2.4	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW40C-092616**

Lab Sample ID: 240-70005-15 Date Sampled: 09/26/2016 1151
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8450.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2333			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2333				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	6.7		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40C-092616**

Lab Sample ID: 240-70005-15 Date Sampled: 09/26/2016 1151
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8450.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2333			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2333				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	18		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	2.1		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40C-092616**

Lab Sample ID: 240-70005-15 Date Sampled: 09/26/2016 1151
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8450.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2333			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2333				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.3	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40D-092616**

Lab Sample ID: 240-70005-16 Date Sampled: 09/26/2016 1157
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8451.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2356			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2356				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.2		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40D-092616**

Lab Sample ID: 240-70005-16 Date Sampled: 09/26/2016 1157
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8451.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2356			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2356				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	2.3		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.39	J	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	86		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40D-092616**

Lab Sample ID: 240-70005-16 Date Sampled: 09/26/2016 1157
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8451.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/06/2016 2356			Final Weight/Volume:	5 mL
Prep Date:	10/06/2016 2356				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)	4.13	3.3	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW41A-092616**

Lab Sample ID: 240-70005-17 Date Sampled: 09/26/2016 1042
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8452.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0020			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0020				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	5.7		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41A-092616**

Lab Sample ID: 240-70005-17 Date Sampled: 09/26/2016 1042
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8452.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0020			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0020				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	0.25	J	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	4.2		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	2.8		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	91		73 - 124
Dibromofluoromethane (Surr)	97		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41A-092616**

Lab Sample ID: 240-70005-17 Date Sampled: 09/26/2016 1042
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8452.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0020			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0020				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.1	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW41B-092616**

Lab Sample ID: 240-70005-18 Date Sampled: 09/26/2016 1045
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8453.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0043			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0043				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	3.9		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41B-092616**

Lab Sample ID: 240-70005-18 Date Sampled: 09/26/2016 1045
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8453.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0043			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0043				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	3.3		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	1.7		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41B-092616**

Lab Sample ID: 240-70005-18 Date Sampled: 09/26/2016 1045
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8453.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0043			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0043				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.5	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW41C-092616**

Lab Sample ID: 240-70005-19 Date Sampled: 09/26/2016 1050
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8454.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0106			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0106				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.6		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41C-092616**

Lab Sample ID: 240-70005-19 Date Sampled: 09/26/2016 1050
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8454.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0106			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0106				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.5		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.70		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41C-092616**

Lab Sample ID: 240-70005-19 Date Sampled: 09/26/2016 1050
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8454.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0106			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0106				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
55644-10-5	Silanol, dimethyl(1,1,2-trimethylpropyl)	4.13	2.8	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41D-092616**

Lab Sample ID: 240-70005-20 Date Sampled: 09/26/2016 1054
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8455.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0129			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U *	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U *	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.58	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41D-092616**

Lab Sample ID: 240-70005-20 Date Sampled: 09/26/2016 1054
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8455.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0129			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.75	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	86		73 - 120
Toluene-d8 (Surr)	90		73 - 124
Dibromofluoromethane (Surr)	93		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41D-092616**

Lab Sample ID: 240-70005-20 Date Sampled: 09/26/2016 1054
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250232	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8455.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 0129			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 0129				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42A-092616**

Lab Sample ID: 240-70005-21 Date Sampled: 09/26/2016 1215
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8485.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1534			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1534				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.71	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42A-092616**

Lab Sample ID: 240-70005-21 Date Sampled: 09/26/2016 1215
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8485.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1534			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1534				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.23	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.96		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42A-092616**

Lab Sample ID: 240-70005-21 Date Sampled: 09/26/2016 1215
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8485.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1534			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1534				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42B-092616**

Lab Sample ID: 240-70005-22 Date Sampled: 09/26/2016 1220
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8486.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1558			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1558				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.99	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42B-092616**

Lab Sample ID: 240-70005-22 Date Sampled: 09/26/2016 1220
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8486.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1558			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1558				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.23	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	1.6		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		63 - 132
4-Bromofluorobenzene (Surr)	90		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	97		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42B-092616**

Lab Sample ID: 240-70005-22 Date Sampled: 09/26/2016 1220
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8486.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1558			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1558				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW42C-092616**

Lab Sample ID: 240-70005-23 Date Sampled: 09/26/2016 1224
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8487.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1622			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1622				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.72	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42C-092616**

Lab Sample ID: 240-70005-23 Date Sampled: 09/26/2016 1224
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8487.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1622			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1622				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.25	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	1.1		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	90		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42C-092616**

Lab Sample ID: 240-70005-23 Date Sampled: 09/26/2016 1224
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8487.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1622			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1622				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42D-092616**

Lab Sample ID: 240-70005-24 Date Sampled: 09/26/2016 1228
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8488.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1645			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1645				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.38	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42D-092616**

Lab Sample ID: 240-70005-24 Date Sampled: 09/26/2016 1228
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8488.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1645			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1645				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.30	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.34	J	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	86		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	94		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42D-092616**

Lab Sample ID: 240-70005-24 Date Sampled: 09/26/2016 1228
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8488.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1645			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1645				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW43A-092616**

Lab Sample ID: 240-70005-25 Date Sampled: 09/26/2016 1014
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8489.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1708			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1708				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	2.3		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43A-092616**

Lab Sample ID: 240-70005-25 Date Sampled: 09/26/2016 1014
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8489.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1708			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1708				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.7		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.52		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43A-092616**

Lab Sample ID: 240-70005-25 Date Sampled: 09/26/2016 1014
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8489.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1708			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1708				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43B-092616**

Lab Sample ID: 240-70005-26 Date Sampled: 09/26/2016 1018
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8490.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1731			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1731				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.7		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43B-092616**

Lab Sample ID: 240-70005-26 Date Sampled: 09/26/2016 1018
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8490.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1731			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1731				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.3		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.36	J	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43B-092616**

Lab Sample ID: 240-70005-26 Date Sampled: 09/26/2016 1018
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8490.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1731			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1731				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43C-092616**

Lab Sample ID: 240-70005-27 Date Sampled: 09/26/2016 1022
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8491.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1755			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1755				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.78	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43C-092616**

Lab Sample ID: 240-70005-27 Date Sampled: 09/26/2016 1022
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8491.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1755			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1755				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.69	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	90		73 - 124
Dibromofluoromethane (Surr)	95		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43C-092616**

Lab Sample ID: 240-70005-27 Date Sampled: 09/26/2016 1022
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8491.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1755			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1755				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW43D-092616**

Lab Sample ID: 240-70005-28 Date Sampled: 09/26/2016 1026
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8492.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1818			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1818				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.84	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43D-092616**

Lab Sample ID: 240-70005-28 Date Sampled: 09/26/2016 1026
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8492.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1818			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1818				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.79	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	97		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43D-092616**

Lab Sample ID: 240-70005-28 Date Sampled: 09/26/2016 1026
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8492.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1818			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1818				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.1	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW44A-092616**

Lab Sample ID: 240-70005-29 Date Sampled: 09/26/2016 0948
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8493.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1841			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1841				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.5		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44A-092616**

Lab Sample ID: 240-70005-29 Date Sampled: 09/26/2016 0948
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8493.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1841			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1841				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.2		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.42	J	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	98		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44A-092616**

Lab Sample ID: 240-70005-29 Date Sampled: 09/26/2016 0948
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8493.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1841			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1841				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.4	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44B-092616**

Lab Sample ID: 240-70005-30 Date Sampled: 09/26/2016 0954
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8494.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1904			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	2.1		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44B-092616**

Lab Sample ID: 240-70005-30 Date Sampled: 09/26/2016 0954
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8494.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1904			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.6		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.55		0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	89		73 - 124
Dibromofluoromethane (Surr)	97		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44B-092616**

Lab Sample ID: 240-70005-30 Date Sampled: 09/26/2016 0954
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8494.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1904			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1904				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.4	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW44C-092616**

Lab Sample ID: 240-70005-31 Date Sampled: 09/26/2016 0957
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8495.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1927			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1927				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.52	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44C-092616**

Lab Sample ID: 240-70005-31 Date Sampled: 09/26/2016 0957
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8495.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1927			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1927				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.54	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	89		73 - 120
Toluene-d8 (Surr)	90		73 - 124
Dibromofluoromethane (Surr)	98		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44C-092616**

Lab Sample ID: 240-70005-31 Date Sampled: 09/26/2016 0957
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8495.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1927			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1927				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW44D-092616**

Lab Sample ID: 240-70005-32 Date Sampled: 09/26/2016 1007
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8496.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1951			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1951				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.33	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44D-092616**

Lab Sample ID: 240-70005-32 Date Sampled: 09/26/2016 1007
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8496.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1951			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1951				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.38	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		63 - 132
4-Bromofluorobenzene (Surr)	88		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	98		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44D-092616**

Lab Sample ID: 240-70005-32 Date Sampled: 09/26/2016 1007
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8496.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 1951			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 1951				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW45A-092616**

Lab Sample ID: 240-70005-33 Date Sampled: 09/26/2016 0923
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8497.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2014			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2014				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.34	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45A-092616**

Lab Sample ID: 240-70005-33 Date Sampled: 09/26/2016 0923
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8497.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2014			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2014				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.43	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	97		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45A-092616**

Lab Sample ID: 240-70005-33 Date Sampled: 09/26/2016 0923
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8497.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2014			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2014				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW45B-092616**

Lab Sample ID: 240-70005-34 Date Sampled: 09/26/2016 0930
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8498.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2037			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2037				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.28	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45B-092616**

Lab Sample ID: 240-70005-34 Date Sampled: 09/26/2016 0930
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8498.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2037			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2037				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.33	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 132
4-Bromofluorobenzene (Surr)	85		73 - 120
Toluene-d8 (Surr)	86		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45B-092616**

Lab Sample ID: 240-70005-34 Date Sampled: 09/26/2016 0930
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8498.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2037			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2037				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.13	2.4	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW45C-092616**

Lab Sample ID: 240-70005-35 Date Sampled: 09/26/2016 0936
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8499.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2101			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2101				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45C-092616**

Lab Sample ID: 240-70005-35 Date Sampled: 09/26/2016 0936
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8499.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2101			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2101				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.26	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	98		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45C-092616**

Lab Sample ID: 240-70005-35 Date Sampled: 09/26/2016 0936
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8499.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2101			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2101				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client Sample ID: **MSA-SW45D-092616**

Lab Sample ID: 240-70005-36 Date Sampled: 09/26/2016 0941
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8500.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2124			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2124				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45D-092616**

Lab Sample ID: 240-70005-36 Date Sampled: 09/26/2016 0941
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8500.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2124			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2124				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.28	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 132
4-Bromofluorobenzene (Surr)	85		73 - 120
Toluene-d8 (Surr)	86		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45D-092616**

Lab Sample ID: 240-70005-36 Date Sampled: 09/26/2016 0941
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8500.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2124			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2124				

Tentatively Identified Compounds **Number TIC's Found: 0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW46A-092616**

Lab Sample ID: 240-70005-37 Date Sampled: 09/26/2016 1211
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8501.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2147			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2147				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	0.54	J	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW46A-092616**

Lab Sample ID: 240-70005-37 Date Sampled: 09/26/2016 1211
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8501.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2147			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2147				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.22	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.65		0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	87		73 - 120
1,2-Dichloroethane-d4 (Surr)	96		63 - 132

Client Sample ID: **MSA-SW47A-092616**

Lab Sample ID: 240-70005-38 Date Sampled: 09/26/2016 1138
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8502.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2210			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2210				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	2.7		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW47A-092616**

Lab Sample ID: 240-70005-38 Date Sampled: 09/26/2016 1138
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8502.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2210			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2210				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	4.5		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	1.1		0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	87		73 - 120
1,2-Dichloroethane-d4 (Surr)	95		63 - 132

Client Sample ID: **MSA-SW48A-092616**

Lab Sample ID: 240-70005-39 Date Sampled: 09/26/2016 1103
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8503.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2233			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2233				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	0.40	J	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	5.3		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW48A-092616**

Lab Sample ID: 240-70005-39 Date Sampled: 09/26/2016 1103
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8503.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2233			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2233				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	1.5	J	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	0.32	J	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	3.8		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	3.3		0.29	0.50
Xylenes, Total	1.8	J	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	89		73 - 120
1,2-Dichloroethane-d4 (Surr)	95		63 - 132

Client Sample ID: **MSA-SW49A-092616**

Lab Sample ID: 240-70005-40 Date Sampled: 09/26/2016 1037
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8504.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2256			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2256				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	4.5		0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW49A-092616**

Lab Sample ID: 240-70005-40 Date Sampled: 09/26/2016 1037
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250386	Instrument ID:	A3UX16
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UXM8504.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/07/2016 2256			Final Weight/Volume:	5 mL
Prep Date:	10/07/2016 2256				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	3.6		0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	2.1		0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	88		73 - 120
1,2-Dichloroethane-d4 (Surr)	96		63 - 132

Client Sample ID: **EL-SW01A-092616**

Lab Sample ID: 240-70005-41 Date Sampled: 09/26/2016 0835
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958911.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1441			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1441				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **EL-SW01A-092616**

Lab Sample ID: 240-70005-41 Date Sampled: 09/26/2016 0835
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958911.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1441			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1441				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.31	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	84		80 - 120
4-Bromofluorobenzene (Surr)	87		73 - 120
1,2-Dichloroethane-d4 (Surr)	82		63 - 132

Client Sample ID: **EL-SW01B-092616**

Lab Sample ID: 240-70005-42 Date Sampled: 09/26/2016 0840
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958912.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1505			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1505				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	0.94	J	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **EL-SW01B-092616**

Lab Sample ID: 240-70005-42 Date Sampled: 09/26/2016 0840
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958912.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1505			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1505				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.28	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	85		73 - 124
Dibromofluoromethane (Surr)	88		80 - 120
4-Bromofluorobenzene (Surr)	83		73 - 120
1,2-Dichloroethane-d4 (Surr)	86		63 - 132

Client Sample ID: **EL-SW01C-092616**

Lab Sample ID: 240-70005-43 Date Sampled: 09/26/2016 0842
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958913.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1530			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1530				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **EL-SW01C-092616**

Lab Sample ID: 240-70005-43 Date Sampled: 09/26/2016 0842
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958913.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1530			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1530				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.30	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	92		73 - 124
Dibromofluoromethane (Surr)	92		80 - 120
4-Bromofluorobenzene (Surr)	92		73 - 120
1,2-Dichloroethane-d4 (Surr)	89		63 - 132

Client Sample ID: **EL-SW01D-092616**

Lab Sample ID: 240-70005-44 Date Sampled: 09/26/2016 0846
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958914.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1554			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1554				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Butanone	5.0	U	0.53	5.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromobenzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Dibromochloromethane	1.0	U	0.43	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromochloromethane	1.0	U	0.50	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Bromodichloromethane	1.0	U	0.29	1.0
tert-Butyl alcohol	20	U	4.9	20
Ethylbenzene	1.0	U	0.25	1.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **EL-SW01D-092616**

Lab Sample ID: 240-70005-44 Date Sampled: 09/26/2016 0846
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958914.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1554			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1554				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Hexachlorobutadiene	1.0	U	0.35	1.0
Diisopropyl ether	5.0	U	0.50	5.0
Isopropylbenzene	1.0	U	0.35	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Methylene Chloride	1.0	U	0.33	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
Naphthalene	1.0	U	0.45	1.0
n-Butylbenzene	1.0	U	0.31	1.0
n-Propylbenzene	1.0	U	0.40	1.0
o-Xylene	1.0	U	0.25	1.0
sec-Butylbenzene	1.0	U	0.48	1.0
Styrene	1.0	U	0.45	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	0.25	J	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
Xylenes, Total	2.0	U	0.52	2.0
tert-Butylbenzene	1.0	U	0.41	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	87		73 - 124
Dibromofluoromethane (Surr)	85		80 - 120
4-Bromofluorobenzene (Surr)	86		73 - 120
1,2-Dichloroethane-d4 (Surr)	85		63 - 132

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **TB-092616**

Lab Sample ID: 240-70005-45TB Date Sampled: 09/26/2016 0000
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958915.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1618			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1618				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.28	1.0
1,1,1-Trichloroethane	1.0	U	0.44	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.22	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.45	1.0
1,1-Dichloroethane	1.0	U	0.30	1.0
1,1-Dichloroethene	1.0	U	0.45	1.0
1,1-Dichloropropene	1.0	U	0.42	1.0
1,2,3-Trichlorobenzene	1.0	U	0.37	1.0
1,2,3-Trichloropropane	1.0	U	0.44	1.0
1,2,3-Trimethylbenzene	5.0	U	0.47	5.0
1,2,4-Trichlorobenzene	1.0	U	0.32	1.0
1,2,4-Trimethylbenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	5.0	U	0.82	5.0
1,2-Dichlorobenzene	1.0	U	0.25	1.0
1,2-Dichloroethane	1.0	U	0.23	1.0
1,2-Dichloropropane	1.0	U	0.25	1.0
1,3-Dichlorobenzene	1.0	U	0.19	1.0
1,3-Dichloropropane	1.0	U	0.19	1.0
1,4-Dichlorobenzene	1.0	U	0.27	1.0
2,2-Dichloropropane	1.0	U	0.26	1.0
2-Chloroethyl vinyl ether	10	U	0.59	10
2-Chlorotoluene	1.0	U	0.40	1.0
2-Hexanone	5.0	U	0.48	5.0
Bromobenzene	1.0	U	0.35	1.0
Bromochloromethane	1.0	U	0.50	1.0
4-Chlorotoluene	1.0	U	0.29	1.0
p-Isopropyltoluene	1.0	U	0.43	1.0
Acetone	5.0	U	0.94	5.0
Benzene	1.0	U	0.35	1.0
Bromoform	1.0	U	0.56	1.0
Bromomethane	1.0	U	0.44	1.0
Carbon disulfide	1.0	U	0.38	1.0
Carbon tetrachloride	1.0	U	0.43	1.0
Chlorobenzene	1.0	U	0.25	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.25	1.0
Chloromethane	1.0	U	0.44	1.0
cis-1,2-Dichloroethene	1.0	U	0.26	1.0
cis-1,3-Dichloropropene	1.0	U	0.46	1.0
Hexachlorobutadiene	1.0	U	0.35	1.0
Dibromomethane	1.0	U	0.42	1.0
Bromodichloromethane	1.0	U	0.29	1.0
Dichlorodifluoromethane	1.0	U	0.32	1.0
Ethylbenzene	1.0	U	0.25	1.0
1,2-Dibromoethane	1.0	U	0.32	1.0
Diisopropyl ether	5.0	U	0.50	5.0

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **TB-092616**

Lab Sample ID: 240-70005-45TB Date Sampled: 09/26/2016 0000
Client Matrix: Water Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958915.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1618			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1618				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.45	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.31	1.0
Isopropylbenzene	1.0	U	0.35	1.0
n-Propylbenzene	1.0	U	0.40	1.0
2-Butanone	5.0	U	0.53	5.0
4-Methyl-2-pentanone	5.0	U	0.99	5.0
sec-Butylbenzene	1.0	U	0.48	1.0
Methyl tert-butyl ether	1.0	U	0.20	1.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.30	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.25	1.0
Styrene	1.0	U	0.45	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.23	5.0
tert-Butylbenzene	1.0	U	0.41	1.0
Tetrachloroethene	1.0	U	0.31	1.0
Toluene	1.0	U	0.23	1.0
trans-1,2-Dichloroethene	1.0	U	0.30	1.0
trans-1,3-Dichloropropene	1.0	U	0.56	1.0
Trichloroethene	1.0	U	0.22	1.0
Trichlorofluoromethane	1.0	U	0.49	1.0
Vinyl acetate	2.0	U	0.41	2.0
Vinyl chloride	0.50	U	0.29	0.50
tert-Butyl alcohol	20	U	4.9	20
Xylenes, Total	2.0	U	0.52	2.0
Dibromochloromethane	1.0	U	0.43	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		63 - 132
4-Bromofluorobenzene (Surr)	87		73 - 120
Toluene-d8 (Surr)	86		73 - 124
Dibromofluoromethane (Surr)	89		80 - 120

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **TB-092616**

Lab Sample ID: 240-70005-45TB
Client Matrix: Water

Date Sampled: 09/26/2016 0000
Date Received: 09/27/2016 0930

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	240-250510	Instrument ID:	A3UX9
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	UX958915.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	10/09/2016 1618			Final Weight/Volume:	5 mL
Prep Date:	10/09/2016 1618				

Tentatively Identified Compounds **Number TIC's Found: 1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
18173-64-3	tert-Butyldimethylsilanol	4.32	2.1	T J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
75-45-6	Chlorodifluoromethane TIC	1.0	U

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37A-092616**

Lab Sample ID: 240-70005-1 Date Sampled: 09/26/2016 1242
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	103SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2017			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	52		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.9	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	2.1	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1156			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	200		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37B-092616**

Lab Sample ID: 240-70005-2 Date Sampled: 09/26/2016 1247
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	108SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2038			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.4	J	1.8	25
Barium	55		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.5	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.1	J	2.6	50
Nickel	2.8	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1206			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37C-092616**

Lab Sample ID: 240-70005-3 Date Sampled: 09/26/2016 1251
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	109SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2042			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.2	J	1.8	25
Barium	52		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.9	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	3.0	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1208			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW37D-092616**

Lab Sample ID: 240-70005-4 Date Sampled: 09/26/2016 1256
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	110SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2047			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.4	J	1.8	25
Barium	57		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	1.3	J	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	5.8	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.2	J	2.6	50
Nickel	3.0	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1210			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38A-092616**

Lab Sample ID: 240-70005-5 Date Sampled: 09/26/2016 1109
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	111SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2051			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	53		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	0.89	J	0.65	5.0
Copper	3.1	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.9	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1212			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38B-092616**

Lab Sample ID: 240-70005-6 Date Sampled: 09/26/2016 1115
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	112SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2055			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	50		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.3	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.8	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1214			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38C-092616**

Lab Sample ID: 240-70005-7 Date Sampled: 09/26/2016 1121
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	115SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2108			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	52		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.4	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	2.8	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1216			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW38D-092616**

Lab Sample ID: 240-70005-8 Date Sampled: 09/26/2016 1127
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	116SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2112			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.0	J	1.8	25
Barium	53		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.3	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	2.6	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	370		31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1218			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39A-092616**

Lab Sample ID: 240-70005-9 Date Sampled: 09/26/2016 0855
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	117SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2117			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	53		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.6	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	2.5	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1220			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39B-092616**

Lab Sample ID: 240-70005-10 Date Sampled: 09/26/2016 0900
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	118SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2121			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	54		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	7.3	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	3.4	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	39	J	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1222			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW39C-092616**

Lab Sample ID: 240-70005-11 Date Sampled: 09/26/2016 0906
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	119SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2125			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	56		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.2	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.8	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1228			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client Sample ID: **MSA-SW39D-092616**

Lab Sample ID: 240-70005-12 Date Sampled: 09/26/2016 0913
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	120SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2130			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	54		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	1.9	J	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.1	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	3.5	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1230			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client Sample ID: **MSA-SW40A-092616**

Lab Sample ID: 240-70005-13 Date Sampled: 09/26/2016 1143
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	121SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2134			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.0	J	1.8	25
Barium	57		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.1	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	3.1	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1232			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40B-092616**

Lab Sample ID: 240-70005-14 Date Sampled: 09/26/2016 1147
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	122SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2138			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	55		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.1	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	3.3	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1234			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40C-092616**

Lab Sample ID: 240-70005-15 Date Sampled: 09/26/2016 1151
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	123SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2142			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.1	J	1.8	25
Barium	57		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	1.0	J	0.65	5.0
Copper	4.4	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	3.1	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1235			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW40D-092616**

Lab Sample ID: 240-70005-16 Date Sampled: 09/26/2016 1157
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	124SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2147			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.0	J	1.8	25
Barium	54		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	6.3	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	2.9	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1237			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41A-092616**

Lab Sample ID: 240-70005-17 Date Sampled: 09/26/2016 1042
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	127SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2200			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	53		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.7	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	2.4	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1239			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41B-092616**

Lab Sample ID: 240-70005-18 Date Sampled: 09/26/2016 1045
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	128SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2204			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	52		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.6	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.2	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1241			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	200		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41C-092616**

Lab Sample ID: 240-70005-19 Date Sampled: 09/26/2016 1050
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	129SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2208			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	54		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.2	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.3	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1243			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1200		33	33
Calcium hardness as calcium carbonate	200		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW41D-092616**

Lab Sample ID: 240-70005-20 Date Sampled: 09/26/2016 1054
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248800	Lab File ID:	130SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 2213			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	53		2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	5.5	J	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.6	J	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248805	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1245			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42A-092616**

Lab Sample ID: 240-70005-21 Date Sampled: 09/26/2016 1215
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	081SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1842			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.9	J	1.8	25
Barium	64	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	1.6	J B	1.3	10
Cobalt	0.99	J	0.65	5.0
Copper	4.5	J B	1.8	10
Lead	1.0	J	0.80	5.0
Molybdenum	4.0	J	2.6	50
Nickel	3.5	J B	1.4	10
Selenium	2.9	J	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1018			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1400		33	33
Calcium hardness as calcium carbonate	230		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42B-092616**

Lab Sample ID: 240-70005-22 Date Sampled: 09/26/2016 1220
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	082SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1846			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.5	J	1.8	25
Barium	61	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	1.7	J B	1.3	10
Cobalt	0.80	J	0.65	5.0
Copper	4.4	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.2	J	2.6	50
Nickel	3.6	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1020			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1400		33	33
Calcium hardness as calcium carbonate	230		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client Sample ID: **MSA-SW42C-092616**

Lab Sample ID: 240-70005-23 Date Sampled: 09/26/2016 1224
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	083SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1850			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	55	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.9	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.7	J	2.6	50
Nickel	2.8	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1022			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW42D-092616**

Lab Sample ID: 240-70005-24 Date Sampled: 09/26/2016 1228
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	084SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1855			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	55	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.1	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	2.6	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1024			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1000		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: MSA-SW43A-092616

Lab Sample ID: 240-70005-25 Date Sampled: 09/26/2016 1014
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	085SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1859			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	58	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	5.5	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.1	J	2.6	50
Nickel	2.7	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1030			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1400		33	33
Calcium hardness as calcium carbonate	230		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43B-092616**

Lab Sample ID: 240-70005-26 Date Sampled: 09/26/2016 1018
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	086SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1903			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	57	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.9	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	2.7	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1032			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1400		33	33
Calcium hardness as calcium carbonate	230		12	12
Magnesium hardness as calcium carbonate	1200		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW43C-092616**

Lab Sample ID: 240-70005-27 Date Sampled: 09/26/2016 1022
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	087SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1908			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	57	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.1	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.2	J	2.6	50
Nickel	2.9	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1034			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1400		33	33
Calcium hardness as calcium carbonate	230		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: MSA-SW43D-092616

Lab Sample ID: 240-70005-28 Date Sampled: 09/26/2016 1026
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	088SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1912			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.0	J	1.8	25
Barium	58	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	5.4	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	2.5	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1035			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1400		33	33
Calcium hardness as calcium carbonate	230		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44A-092616**

Lab Sample ID: 240-70005-29 Date Sampled: 09/26/2016 0948
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	091SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1925			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	52	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.5	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	2.8	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1037			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44B-092616**

Lab Sample ID: 240-70005-30 Date Sampled: 09/26/2016 0954
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	092SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1929			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	56	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	3.9	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	3.2	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1039			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44C-092616**

Lab Sample ID: 240-70005-31 Date Sampled: 09/26/2016 0957
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	093SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1934			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	56	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.9	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.8	J	2.6	50
Nickel	3.2	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1041			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW44D-092616**

Lab Sample ID: 240-70005-32 Date Sampled: 09/26/2016 1007
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	094SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1938			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	54	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.3	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	2.9	J	2.6	50
Nickel	2.6	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	32	J B	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1043			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: **MSA-SW45A-092616**

Lab Sample ID: 240-70005-33 Date Sampled: 09/26/2016 0923
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	095SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1942			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	25	U	1.8	25
Barium	56	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	6.0	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	3.1	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1045			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: MSA-SW45B-092616

Lab Sample ID: 240-70005-34 Date Sampled: 09/26/2016 0930
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	096SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1947			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.8	J	1.8	25
Barium	52	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	1.6	J B	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	14	B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	3.0	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1047			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	210		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: MSA-SW45C-092616

Lab Sample ID: 240-70005-35 Date Sampled: 09/26/2016 0936
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	097SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1951			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	1.9	J	1.8	25
Barium	57	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	4.2	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	2.6	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1053			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Client: Tetra Tech, Inc. Job Number: 240-70005-1

Client Sample ID: MSA-SW45D-092616

Lab Sample ID: 240-70005-36 Date Sampled: 09/26/2016 0941
Client Matrix: Water Date Received: 09/27/2016 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-251370	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-248806	Lab File ID:	098SMPL.d
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	10/13/2016 1955			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	10	U	1.4	10
Arsenic	2.0	J	1.8	25
Barium	56	B	2.6	25
Beryllium	5.0	U *	2.0	5.0
Cadmium	5.0	U	1.6	5.0
Chromium	10	U	1.3	10
Cobalt	5.0	U	0.65	5.0
Copper	5.3	J B	1.8	10
Lead	5.0	U	0.80	5.0
Molybdenum	3.0	J	2.6	50
Nickel	2.8	J B	1.4	10
Selenium	25	U	2.4	25
Silver	5.0	U	0.15	5.0
Thallium	5.0	U	1.4	5.0
Vanadium	25	U	2.7	25
Zinc	100	U	31	100
Tungsten	50	U	4.5	50

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-249045	Instrument ID:	H2
Prep Method:	7470A	Prep Batch:	240-248812	Lab File ID:	0929A16H2.CSV
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/29/2016 1055			Final Weight/Volume:	50 mL
Prep Date:	09/28/2016 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.090	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-251474	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	10/14/2016 1209			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	1300		33	33
Calcium hardness as calcium carbonate	220		12	12
Magnesium hardness as calcium carbonate	1100		21	21

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water

Report Number: 240-70005-1

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 9/27/2016 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.4º C, 2.0º C and 3.6º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35), MSA-SW45D-092616 (240-70005-36), MSA-SW46A-092616 (240-70005-37), MSA-SW47A-092616 (240-70005-38), MSA-SW48A-092616 (240-70005-39), MSA-SW49A-092616 (240-70005-40), EL-SW01A-092616 (240-70005-41), EL-SW01B-092616 (240-70005-42), EL-SW01C-092616 (240-70005-43), EL-SW01D-092616 (240-70005-44) and TB-092616 (240-70005-45) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 10/06/2016, 10/07/2016 and 10/09/2016.

Hexachlorobutadiene was detected in method blank MB 240-250232/7 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.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-250232.

The laboratory control sample (LCS) for analytical batch 240-250232 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane and 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples were impacted. MSA-SW37A-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11),

MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20) and (LCS 240-250232/4)

The continuing calibration verification (CCV) associated with batch 240-250232 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MSA-SW37A-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20) and (CCVIS 240-250232/3).

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-250386.

The following samples were received preserved with hydrochloric acid: MSA-SW37A-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35), MSA-SW45D-092616 (240-70005-36), MSA-SW46A-092616 (240-70005-37), MSA-SW47A-092616 (240-70005-38), MSA-SW48A-092616 (240-70005-39), MSA-SW49A-092616 (240-70005-40), EL-SW01A-092616 (240-70005-41), EL-SW01B-092616 (240-70005-42), EL-SW01C-092616 (240-70005-43), EL-SW01D-092616 (240-70005-44) and TB-092616 (240-70005-45). The requested target analyte list contains 2-chloroethyl vinyl ether, which may degrade in an acidic medium.

The continuing calibration verification (CCV) analyzed in batch 240-250510 was outside the method criteria for the following analytes: bromomethane, and trichlorofluoromethane. 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 analytes is considered estimated.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-250510.

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-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35) and MSA-SW45D-092616 (240-70005-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 09/28/2016 and analyzed on 10/13/2016.

Zinc was detected in method blank MB 240-248806/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Several analytes were detected in method blank MB 240-248806/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for preparation batch 240-248800 and 240-248806 and analytical batch 240-251370 recovered outside control limits for the following analyte:beryllium. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.MSA-SW37A-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616

(240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35) and MSA-SW45D-092616 (240-70005-36)

The following samples was diluted due to the nature of the sample matrix: MSA-SW37A-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35) and MSA-SW45D-092616 (240-70005-36). 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-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35) and MSA-SW45D-092616 (240-70005-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/28/2016 and analyzed on 09/29/2016.

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-092616 (240-70005-1), MSA-SW37B-092616 (240-70005-2), MSA-SW37C-092616 (240-70005-3), MSA-SW37D-092616 (240-70005-4), MSA-SW38A-092616 (240-70005-5), MSA-SW38B-092616 (240-70005-6), MSA-SW38C-092616 (240-70005-7), MSA-SW38D-092616 (240-70005-8), MSA-SW39A-092616 (240-70005-9), MSA-SW39B-092616 (240-70005-10), MSA-SW39C-092616 (240-70005-11), MSA-SW39D-092616 (240-70005-12), MSA-SW40A-092616 (240-70005-13), MSA-SW40B-092616 (240-70005-14), MSA-SW40C-092616 (240-70005-15), MSA-SW40D-092616 (240-70005-16), MSA-SW41A-092616 (240-70005-17), MSA-SW41B-092616 (240-70005-18), MSA-SW41C-092616 (240-70005-19), MSA-SW41D-092616 (240-70005-20), MSA-SW42A-092616 (240-70005-21), MSA-SW42B-092616 (240-70005-22), MSA-SW42C-092616 (240-70005-23), MSA-SW42D-092616 (240-70005-24), MSA-SW43A-092616 (240-70005-25), MSA-SW43B-092616 (240-70005-26), MSA-SW43C-092616 (240-70005-27), MSA-SW43D-092616 (240-70005-28), MSA-SW44A-092616 (240-70005-29), MSA-SW44B-092616 (240-70005-30), MSA-SW44C-092616 (240-70005-31), MSA-SW44D-092616 (240-70005-32), MSA-SW45A-092616 (240-70005-33), MSA-SW45B-092616 (240-70005-34), MSA-SW45C-092616 (240-70005-35) and MSA-SW45D-092616 (240-70005-36) were analyzed for dissolved hardness (as CaCO3) by calculation in accordance with SM 2340B. The samples were analyzed on 10/14/2016.

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

Qualifiers

GC/MS VOA

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

GC/MS VOA TICs

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

Glossary

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

180325 1.0/1.4 1.6/2.0 3.2/3.6

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: Josh Mullis	Date: 9/26/2016	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) W			
(301) 528-3021 Phone	TAT if different from Below: 21 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O # 112IC07804	☐ 1 day			Sampler: Mullis

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (8260C) + Freon 113/22 (TIC)	Dissolved Metals (6020B/7470A)	Hardness (2340B)	~~1,4-Dioxane (8270C)~~	Sample Specific Notes:
MSA-SW37A-092616	9/26/2016	1242	SW	Water	4	x	x	x	x		
MSA-SW37B-092616	9/26/2016	1247	SW	Water	4	x	x	x	x		
MSA-SW37C-092616	9/26/2016	1251	SW	Water	4	x	x	x	x		
MSA-SW37D-092616	9/26/2016	1256	SW	Water	4	x	x	x	x		
MSA-SW38A-092616	9/26/2016	1109	SW	Water	4	x	x	x	x		
MSA-SW38B-092616	9/26/2016	1115	SW	Water	4	x	x	x	x		
MSA-SW38C-092616	9/26/2016	1121	SW	Water	4	x	x	x	x		
MSA-SW38D-092616	9/26/2016	1127	SW	Water	4	x	x	x	x		
MSA-SW39A-092616	9/26/2016	0855	SW	Water	4	x	x	x	x		
MSA-SW39B-092616	9/26/2016	0900	SW	Water	4	x	x	x	x		
MSA-SW39C-092616	9/26/2016	0906	SW	Water	4	x	x	x	x		
MSA-SW39D-092616	9/26/2016	0913	SW	Water	4	x	x	x	x		
							2	4	4		

240-70005 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:
[signature]	Tetra Tech	9/26/16 1600	[signature]	TestAmerica	9-26-2016 / 1600
[signature]	TestAmerica	9-26-2016/1645	[signature]	TA	9-27-16 930

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

1.0/1.4 1.6/2.0 3.2/3.6

180325

BALTIMORE

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: Josh Mullis	Date: 9/26/2016	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) W			
(301) 528-3021 Phone	TAT if different from Below: 21 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O # 112ICD7804	☐ 1 day			Sampler: Mullis

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (8260C) + Freon 113/22 + TEC	Dissolved Metals (6020B/7470A)	Hardness (2340B)	~~1,4-Dioxane (8270C)~~	Sample Specific Notes:
MSA-SW40A-092616	9/26/2016	1143	SW	Water	4	x	x	x	x		
MSA-SW40B-092616	9/26/2016	1147	SW	Water	4	x	x	x	x		
MSA-SW40C-092616	9/26/2016	1151	SW	Water	4	x	x	x	x		
MSA-SW40D-092616	9/26/2016	1157	SW	Water	4	x	x	x	x		
MSA-SW41A-092616	9/26/2016	1042	SW	Water	4	x	x	x	x		
MSA-SW41B-092616	9/26/2016	1045	SW	Water	4	x	x	x	x		
MSA-SW41C-092616	9/26/2016	1050	SW	Water	4	x	x	x	x		
MSA-SW41D-092616	9/26/2016	1054	SW	Water	4	x	x	x	x		
MSA-SW42A-092616	9/26/2016	1215	SW	Water	4	x	x	x	x		
MSA-SW42B-092616	9/26/2016	1220	SW	Water	4	x	x	x	x		
MSA-SW42C-092616	9/26/2016	1224	SW	Water	4	x	x	x	x		
MSA-SW42D-092616	9/26/2016	1228	SW	Water	4	x	x	x	x		
							2	4	4		

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	9/26/16 1600	[signature]	TestAmerica	9-26-2016/1600
[signature]	TestAmerica	9-26-2016/1645	[signature]	TA	9-27-16 930

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

180325

1.0/1.4 1.6/2.0 32/3.6

BALTIMORE

Chain of Custody Record

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Josh Mullis	Date: 9/26/2016	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) W			
(301) 528-3021 Phone	TAT if different from Below 21 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O # 112EC07804	☐ 1 day			Sampler: Mull.s

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (8260C) +Freon 113/22+TEC	Dissolved Metals (6020B/7470A)	Hardness (2340B)	~~1,4-Dioxane (8270C)~~ JAM	Sample Specific Notes:
MSA-SW43A-092616	9/26/2016	1014	SW	Water	4	x	x	x	x		
MSA-SW43B-092616	9/26/2016	1018	SW	Water	4	x	x	x	x		
MSA-SW43C-092616	9/26/2016	1022	SW	Water	4	x	x	x	x		
MSA-SW43D-092616	9/26/2016	1026	SW	Water	4	x	x	x	x		
MSA-SW44A-092616	9/26/2016	0948	SW	Water	4	x	x	x	x		
MSA-SW44B-092616	9/26/2016	0954	SW	Water	4	x	x	x	x		
MSA-SW44C-092616	9/26/2016	0957	SW	Water	4	x	x	x	x		
MSA-SW44D-092616	9/26/2016	1007	SW	Water	4	x	x	x	x		
MSA-SW45A-092616	9/26/2016	0923	SW	Water	4	x	x	x	x		
MSA-SW45B-092616	9/26/2016	0930	SW	Water	4	x	x	x	x		
MSA-SW45C-092616	9/26/2016	0936	SW	Water	4	x	x	x	x		
MSA-SW45D-092616	9/26/2016	0941	SW	Water	4	x	x	x	x		
							2	4	4		

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	9/26/16 1600	[signature]	TestAmerica	9-26-2016 /1600
[signature]	TestAmerica	9-26-2016/1615	[signature]	TA	9-27-16 930

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

1.0/1.4 3.2/3.6
1.6/2.0

North Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

180325

BALTIMORE

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Josh Mullis	Date: 9/26/2016	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) W			
(301) 528-3021 Phone	TAT if different from Below: 21 DAYS			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
PO # 112160804	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (8260C)	1,4-Dioxane (8270C) SIM	Sample Specific Notes:
MSA-SW46A-092616	9/26/2016	1211	SW	AQ	3		x		
MSA-SW47A-092616	9/26/2016	1138	SW	AQ	3		x		
MSA-SW48A-092616	9/26/2016	1103	SW	AQ	3		x		
MSA-SW49A-092616	9/26/2016	1037	SW	AQ	3		x		
EL-SW01A-092616	9/26/2016	0835	SW	AQ	3		x		
EL-SW01B-092616	9/26/2016	0840	SW	AQ	3		x		
EL-SW01C-092616	9/26/2016	0842	SW	AQ	3		x		
EL-SW01D-092616	9/26/2016	0846	SW	AQ	3		x		
TB-092616	--	--	TB	AQ	2		x		
							2		

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	9/26/16 1600		TestAmerica	9-26-2016 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	9-26-2016 1645		TA	9-27-16 930
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 # : 70005**
Canton Facility

Client Tetra Tech Site Name _____ Cooler unpacked by:

Cooler Received on 9-27-16 Opened on 9-27-16

FedEx: 1st Grd ~~Exp~~ UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

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

TestAmerica Cooler # _____ Foam Box Client Cooler Box (Other) _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF +1.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 3 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)

If yes, Questions 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# **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 #_____ (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) _____ 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 # :**_____
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	8	1.0	1.4	ICE
"	"	1.6	2.0	"
"	"	3.2	3.6	"

Method 8260C

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

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: BFB4965.D BFB Injection Date: 09/02/2016

Instrument ID: A3UX16 BFB Injection Time: 17:51

Analysis Batch No.: 245431

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	72.6	
175	5.0 - 9.0 % of mass 174	5.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	71.8	(99.0) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.6) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-245431/6	UXM7645.D	09/02/2016	18:19
	STD8260 240-245431/7	UXM7646.D	09/02/2016	18:42
	STD8260 240-245431/8	UXM7647.D	09/02/2016	19:05
	ICIS 240-245431/9	UXM7648.D	09/02/2016	19:28
	STD8260 240-245431/10	UXM7649.D	09/02/2016	19:51
	STD8260 240-245431/11	UXM7650.D	09/02/2016	20:14
	STDA9 240-245431/13	UXM7652.D	09/02/2016	21:00
	STDA9 240-245431/14	UXM7653.D	09/02/2016	21:23
	STDA9 240-245431/15	UXM7654.D	09/02/2016	21:46
	STDA9 240-245431/16	UXM7655.D	09/02/2016	22:10
	STDA9 240-245431/17	UXM7656.D	09/02/2016	22:32
	STDA9 240-245431/18	UXM7657.D	09/02/2016	22:56
	ICV 240-245431/20	UXM7659.D	09/02/2016	23:42
	ICV 240-245431/21	UXM7660.D	09/03/2016	00:05

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: BFB4966.D BFB Injection Date: 09/06/2016

Instrument ID: A3UX16 BFB Injection Time: 15:20

Analysis Batch No.: 245670

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	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	73.9	
175	5.0 - 9.0 % of mass 174	5.2	(7.0) 1
176	95.0 - 101.0 % of mass 174	70.8	(95.9) 1
177	5.0 - 9.0 % of mass 176	4.6	(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
	DOWSTD 240-245670/9	UXM7672.D	09/06/2016	18:05
	DOWSTD 240-245670/10	UXM7673.D	09/06/2016	18:42
	DOWSTD 240-245670/11	UXM7674.D	09/06/2016	19:06
	DOWSTD 240-245670/12	UXM7675.D	09/06/2016	19:31
	DOWSTD 240-245670/13	UXM7676.D	09/06/2016	19:55
	DOWSTD 240-245670/14	UXM7677.D	09/06/2016	20:18

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: BFB5008.D BFB Injection Date: 10/06/2016

Instrument ID: A3UX16 BFB Injection Time: 15:47

Analysis Batch No.: 250232

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.3	
75	30.0 - 60.0 % of mass 95	44.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.3	(0.5) 1
174	50.0 - 120.00 % of mass 95	73.0	
175	5.0 - 9.0 % of mass 174	4.9	(6.8) 1
176	95.0 - 101.0 % of mass 174	71.7	(98.2) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.6) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-250232/3	UXM8431.D	10/06/2016	16:12
	LCS 240-250232/4	UXM8432.D	10/06/2016	16:35
	CCV 240-250232/5	UXM8433.D	10/06/2016	16:59
	MB 240-250232/7	UXM8435.D	10/06/2016	17:45
MSA-SW37A-092616	240-70005-1	UXM8436.D	10/06/2016	18:08
MSA-SW37B-092616	240-70005-2	UXM8437.D	10/06/2016	18:31
MSA-SW37C-092616	240-70005-3	UXM8438.D	10/06/2016	18:54
MSA-SW37D-092616	240-70005-4	UXM8439.D	10/06/2016	19:17
MSA-SW38A-092616	240-70005-5	UXM8440.D	10/06/2016	19:40
MSA-SW38B-092616	240-70005-6	UXM8441.D	10/06/2016	20:04
MSA-SW38C-092616	240-70005-7	UXM8442.D	10/06/2016	20:27
MSA-SW38D-092616	240-70005-8	UXM8443.D	10/06/2016	20:50
MSA-SW39A-092616	240-70005-9	UXM8444.D	10/06/2016	21:13
MSA-SW39B-092616	240-70005-10	UXM8445.D	10/06/2016	21:37
MSA-SW39C-092616	240-70005-11	UXM8446.D	10/06/2016	22:00
MSA-SW39D-092616	240-70005-12	UXM8447.D	10/06/2016	22:23
MSA-SW40A-092616	240-70005-13	UXM8448.D	10/06/2016	22:47
MSA-SW40B-092616	240-70005-14	UXM8449.D	10/06/2016	23:10
MSA-SW40C-092616	240-70005-15	UXM8450.D	10/06/2016	23:33
MSA-SW40D-092616	240-70005-16	UXM8451.D	10/06/2016	23:56
MSA-SW41A-092616	240-70005-17	UXM8452.D	10/07/2016	00:20
MSA-SW41B-092616	240-70005-18	UXM8453.D	10/07/2016	00:43
MSA-SW41C-092616	240-70005-19	UXM8454.D	10/07/2016	01:06
MSA-SW41D-092616	240-70005-20	UXM8455.D	10/07/2016	01:29

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: BFB5009.D BFB Injection Date: 10/07/2016

Instrument ID: A3UX16 BFB Injection Time: 13:05

Analysis Batch No.: 250386

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	44.3	
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	0.8	(1.0) 1
174	50.0 - 120.00 % of mass 95	73.3	
175	5.0 - 9.0 % of mass 174	5.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	72.2	(98.5) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.2) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-250386/2	UXM8480.D	10/07/2016	13:32
	LCS 240-250386/3	UXM8481.D	10/07/2016	14:01
	CCV 240-250386/5	UXM8483.D	10/07/2016	14:48
	MB 240-250386/6	UXM8484.D	10/07/2016	15:11
MSA-SW42A-092616	240-70005-21	UXM8485.D	10/07/2016	15:34
MSA-SW42B-092616	240-70005-22	UXM8486.D	10/07/2016	15:58
MSA-SW42C-092616	240-70005-23	UXM8487.D	10/07/2016	16:22
MSA-SW42D-092616	240-70005-24	UXM8488.D	10/07/2016	16:45
MSA-SW43A-092616	240-70005-25	UXM8489.D	10/07/2016	17:08
MSA-SW43B-092616	240-70005-26	UXM8490.D	10/07/2016	17:31
MSA-SW43C-092616	240-70005-27	UXM8491.D	10/07/2016	17:55
MSA-SW43D-092616	240-70005-28	UXM8492.D	10/07/2016	18:18
MSA-SW44A-092616	240-70005-29	UXM8493.D	10/07/2016	18:41
MSA-SW44B-092616	240-70005-30	UXM8494.D	10/07/2016	19:04
MSA-SW44C-092616	240-70005-31	UXM8495.D	10/07/2016	19:27
MSA-SW44D-092616	240-70005-32	UXM8496.D	10/07/2016	19:51
MSA-SW45A-092616	240-70005-33	UXM8497.D	10/07/2016	20:14
MSA-SW45B-092616	240-70005-34	UXM8498.D	10/07/2016	20:37
MSA-SW45C-092616	240-70005-35	UXM8499.D	10/07/2016	21:01
MSA-SW45D-092616	240-70005-36	UXM8500.D	10/07/2016	21:24
MSA-SW46A-092616	240-70005-37	UXM8501.D	10/07/2016	21:47
MSA-SW47A-092616	240-70005-38	UXM8502.D	10/07/2016	22:10
MSA-SW48A-092616	240-70005-39	UXM8503.D	10/07/2016	22:33
MSA-SW49A-092616	240-70005-40	UXM8504.D	10/07/2016	22:56

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: BFB3395.D BFB Injection Date: 08/24/2016

Instrument ID: A3UX9 BFB Injection Time: 20:13

Analysis Batch No.: 244166

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.9	
75	30.0 - 60.0 % of mass 95	51.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	92.9	
175	5.0 - 9.0 % of mass 174	7.7	(8.3) 1
176	95.0 - 101.0 % of mass 174	89.0	(95.8) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.2) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-244166/8	UX958010.D	08/24/2016	20:38
	STD8260 240-244166/9	UX958011.D	08/24/2016	21:01
	STD8260 240-244166/10	UX958012.D	08/24/2016	21:25
	ICIS 240-244166/11	UX958013.D	08/24/2016	21:49
	STD8260 240-244166/12	UX958014.D	08/24/2016	22:13
	STD8260 240-244166/13	UX958015.D	08/24/2016	22:37
	STDA9 240-244166/15	UX958017.D	08/24/2016	23:25
	STDA9 240-244166/16	UX958018.D	08/24/2016	23:49
	STDA9 240-244166/17	UX958019.D	08/25/2016	00:13
	STDA9 240-244166/18	UX958020.D	08/25/2016	00:36
	STDA9 240-244166/19	UX958021.D	08/25/2016	01:01
	STDA9 240-244166/20	UX958022.D	08/25/2016	01:25
	ICV 240-244166/22	UX958024.D	08/25/2016	02:13
	ICV 240-244166/23	UX958025.D	08/25/2016	02:37

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: BFB3454.D BFB Injection Date: 10/09/2016

Instrument ID: A3UX9 BFB Injection Time: 10:56

Analysis Batch No.: 250510

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	47.5	
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	(0.5) 1
174	50.0 - 120.00 % of mass 95	94.6	
175	5.0 - 9.0 % of mass 174	6.3	(6.6) 1
176	95.0 - 101.0 % of mass 174	90.6	(95.7) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.3) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-250510/2	UX958905.D	10/09/2016	12:11
	LCS 240-250510/3	UX958906.D	10/09/2016	12:35
	CCV 240-250510/4	UX958907.D	10/09/2016	13:01
	MB 240-250510/6	UX958909.D	10/09/2016	13:50
EL-SW01A-092616	240-70005-41	UX958911.D	10/09/2016	14:41
EL-SW01B-092616	240-70005-42	UX958912.D	10/09/2016	15:05
EL-SW01C-092616	240-70005-43	UX958913.D	10/09/2016	15:30
EL-SW01D-092616	240-70005-44	UX958914.D	10/09/2016	15:54
TB-092616	240-70005-45	UX958915.D	10/09/2016	16:18

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-245431/6	UXM7645.D
Level 2	STD8260 240-245431/7	UXM7646.D
Level 3	STD8260 240-245431/8	UXM7647.D
Level 4	ICIS 240-245431/9	UXM7648.D
Level 5	STD8260 240-245431/10	UXM7649.D
Level 6	STD8260 240-245431/11	UXM7650.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2964 0.2824	0.2784	0.3055	0.2471	0.2588	Ave		0.2781			0.1000	7.9		20.0			
Chloromethane	0.3944 0.3913	0.3679	0.3925	0.3634	0.3807	Ave		0.3817			0.1000	3.5		20.0			
Vinyl chloride	0.3796 0.3692	0.3253	0.3671	0.3375	0.3532	Ave		0.3553			0.1000	5.8		20.0			
Butadiene	0.3938 0.3354	0.3134	0.3433	0.3036	0.3151	Ave		0.3341				9.8		20.0			
Bromomethane	0.2170 0.1835	0.1898	0.1955	0.1783	0.1769	Ave		0.1902			0.0500	7.8		20.0			
Chloroethane	0.2032 0.2183	0.2061	0.2212	0.2047	0.2110	Ave		0.2108			0.0500	3.6		20.0			
Dichlorofluoromethane	0.5256 0.5090	0.4876	0.5140	0.4759	0.4851	Ave		0.4995				3.9		20.0			
Trichlorofluoromethane	0.3608 0.3425	0.3166	0.3571	0.3107	0.3198	Ave		0.3346			0.1000	6.5		20.0			
Ethyl ether	0.2097 0.1966	0.1851	0.1936	0.1878	0.1909	Ave		0.1940				4.5		20.0			
Acrolein	0.0343 0.0281	0.0310	0.0272	0.0261	0.0277	Ave		0.0291				10.4		20.0			
1,1-Dichloroethene	0.2174 0.2511	0.2288	0.2410	0.2430	0.2488	Ave		0.2383			0.1000	5.4		20.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	+++++ 0.1603	0.1431	0.1520	0.1487	0.1523	Ave		0.1513			0.0500	4.1		20.0			
Acetone	+++++ 0.0427	0.1213	0.0526	0.0493	0.0438	Lin1	0.1652	0.0423			0.0100				0.9990		0.9900
Iodomethane	0.3734 0.3925	0.3921	0.4056	0.3872	0.3881	Ave		0.3898				2.7		20.0			
Carbon disulfide	0.9225 0.9229	0.8595	0.9086	0.8777	0.8985	Ave		0.8983			0.1000	2.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1651 0.1876	0.1603	0.1796	0.1722	0.1799	Ave		0.1741				5.9		20.0			
Methyl acetate	0.1336 0.1144	0.1074	0.1096	0.1084	0.1103	Ave		0.1139			0.1000	8.7		20.0			
Methylene Chloride	+++++ 0.3064	0.6659	0.3423	0.3090	0.3043	Lin1	0.3695	0.2975			0.1000				1.0000		0.9900
tert-Butyl alcohol	0.0131 0.0131	0.0114	0.0115	0.0119	0.0121	Ave		0.0122				6.2		20.0			
Acrylonitrile	0.0606 0.0614	0.0603	0.0584	0.0568	0.0592	Ave		0.0594				2.8		20.0			
trans-1,2-Dichloroethene	0.2852 0.3013	0.2721	0.2954	0.2898	0.2961	Ave		0.2900			0.1000	3.6		20.0			
Methyl tert-butyl ether	0.6621 0.6927	0.6761	0.6835	0.6560	0.6608	Ave		0.6719			0.1000	2.2		20.0			
Hexane	0.2884 0.2770	0.2866	0.2484	0.2532	0.2649	Ave		0.2697				6.3		20.0			
1,1-Dichloroethane	0.4903 0.5264	0.4734	0.5134	0.4983	0.5133	Ave		0.5025			0.2000	3.8		20.0			
Vinyl acetate	0.3776 0.3676	0.3456	0.3600	0.3514	0.3608	Ave		0.3605				3.2		20.0			
cis-1,2-Dichloroethene	0.3248 0.3150	0.3032	0.3041	0.3002	0.3099	Ave		0.3095			0.1000	3.0		20.0			
2,2-Dichloropropane	0.3336 0.3825	0.3662	0.3884	0.3740	0.3730	Ave		0.3696				5.2		20.0			
2-Butanone	0.0724 0.0599	0.0632	0.0596	0.0587	0.0584	Ave		0.0621			0.0100	8.6		20.0			
Bromochloromethane	0.1290 0.1268	0.1205	0.1233	0.1201	0.1243	Ave		0.1240				2.8		20.0			
Tetrahydrofuran	+++++ 0.0428	0.0379	0.0412	0.0399	0.0411	Ave		0.0406				4.5		20.0			
Chloroform	0.4798 0.4729	0.4386	0.4534	0.4511	0.4582	Ave		0.4590			0.2000	3.3		20.0			
1,1,1-Trichloroethane	0.3081 0.4024	0.3439	0.3766	0.3901	0.3952	Ave		0.3694			0.1000	9.9		20.0			
Cyclohexane	0.3409 0.4530	0.3931	0.4085	0.4161	0.4371	Ave		0.4081			0.1000	9.6		20.0			
1,1-Dichloropropene	0.3206 0.3859	0.3208	0.3535	0.3628	0.3693	Ave		0.3522				7.5		20.0			
Carbon tetrachloride	0.2145 0.3285	0.2708	0.2976	0.3060	0.3192	Ave		0.2894			0.1000	14.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0045 0.0039	0.0035	0.0035	0.0036	0.0036	Ave		0.0038				10.2		20.0			
Benzene	1.2117 1.2123	1.1128	1.1716	1.1460	1.1847	Ave		1.1732			0.5000	3.3		20.0			
1,2-Dichloroethane	0.3202 0.3105	0.2996	0.3009	0.3011	0.3023	Ave		0.3058			0.1000	2.6		20.0			
n-Heptane	+++++ 0.1244	0.7151	0.1654	0.1390	0.1274	Lin1	0.5948	0.1125							0.9990		0.9900
Trichloroethene	0.2741 0.2841	0.2542	0.2732	0.2827	0.2792	Ave		0.2746			0.1500	4.0		20.0			
Methylcyclohexane	0.3442 0.3840	0.3491	0.3405	0.3507	0.3686	Ave		0.3562			0.1000	4.7		20.0			
1,2-Dichloropropane	0.2636 0.2758	0.2631	0.2685	0.2627	0.2692	Ave		0.2672			0.1000	1.9		20.0			
Dibromomethane	0.1306 0.1193	0.1154	0.1181	0.1173	0.1200	Ave		0.1201				4.5		20.0			
1,4-Dioxane	+++++ 0.0013	+++++	0.0010	0.0011	0.0012	Ave		0.0011				9.9		20.0			
Bromodichloromethane	0.3324 0.3308	0.3027	0.3176	0.3127	0.3278	Ave		0.3207			0.1500	3.7		20.0			
2-Chloroethyl vinyl ether	0.1142 0.1191	0.1056	0.1114	0.1131	0.1227	Ave		0.1143				5.3		20.0			
cis-1,3-Dichloropropene	0.4252 0.4292	0.3840	0.4230	0.4125	0.4258	Ave		0.4166			0.1500	4.1		20.0			
4-Methyl-2-pentanone	0.1371 0.1420	0.1262	0.1351	0.1336	0.1378	Ave		0.1353			0.0500	3.9		20.0			
Toluene	1.7512 1.7872	1.5727	1.7282	1.6984	1.7218	Ave		1.7099			0.4000	4.3		20.0			
trans-1,3-Dichloropropene	0.4907 0.4905	0.4258	0.4585	0.4597	0.4779	Ave		0.4672			0.1000	5.3		20.0			
Ethyl methacrylate	0.3199 0.3566	0.3152	0.3330	0.3238	0.3474	Ave		0.3327				4.9		20.0			
1,1,2-Trichloroethane	0.2737 0.2588	0.2294	0.2537	0.2468	0.2540	Ave		0.2527			0.1000	5.8		20.0			
1,3-Dichloropropane	0.4673 0.4810	0.4784	0.4775	0.4691	0.4856	Ave		0.4765				1.5		20.0			
Tetrachloroethene	0.2611 0.2926	0.2648	0.2726	0.2768	0.2850	Ave		0.2755			0.1500	4.3		20.0			
2-Hexanone	0.1223 0.1259	0.1205	0.1170	0.1194	0.1226	Ave		0.1213			0.0500	2.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	0.2666 0.2982	0.2415	0.2769	0.2750	0.2867	Ave		0.2742				7.0		20.0			
1,2-Dibromoethane	0.2402 0.2480	0.2338	0.2359	0.2320	0.2392	Ave		0.2382				2.4		20.0			
Chlorobenzene	1.1963 1.1143	1.0283	1.0882	1.0620	1.0871	Ave		1.0960			0.3000	5.2		20.0			
1,1,1,2-Tetrachloroethane	0.3154 0.3735	0.3379	0.3512	0.3485	0.3531	Ave		0.3466				5.5		20.0			
Ethylbenzene	0.5329 0.6219	0.5215	0.5871	0.5872	0.6053	Ave		0.5760				7.0		20.0			
m-Xylene & p-Xylene	0.6942 0.7581	0.6718	0.7389	0.7300	0.7403	Ave		0.7222				4.5		20.0			
o-Xylene	0.7531 0.7776	0.6703	0.7605	0.7368	0.7361	Ave		0.7391				5.0		20.0			
Styrene	1.1185 1.2977	1.0691	1.2198	1.1980	1.2501	Ave		1.1922			0.3000	7.1		20.0			
Bromoform	0.1372 0.1558	0.1159	0.1429	0.1384	0.1451	Ave		0.1392			0.1000	9.5		20.0			
Isopropylbenzene	1.6297 1.9023	1.5616	1.7557	1.7736	1.7736	Ave		1.7327			0.1000	7.0		20.0			
1,1,2,2-Tetrachloroethane	0.5692 0.5674	0.5407	0.5634	0.5573	0.5661	Ave		0.5607			0.3000	1.9		20.0			
Bromobenzene	0.8058 0.8109	0.7520	0.7926	0.7636	0.8087	Ave		0.7889				3.2		20.0			
1,2,3-Trichloropropane	0.1324 0.1639	0.1034	0.1609	0.1598	0.1638	Ave		0.1474				16.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1641	0.1320	0.1506	0.1487	0.1568	Ave		0.1504				7.9		20.0			
n-Propylbenzene	0.7978 0.9271	0.7609	0.8868	0.8787	0.9235	Ave		0.8625				7.9		20.0			
2-Chlorotoluene	0.8312 0.8160	0.7192	0.7894	0.7888	0.8057	Ave		0.7917				4.9		20.0			
1,3,5-Trimethylbenzene	2.6432 2.9051	2.3806	2.7635	2.7988	2.8501	Ave		2.7236				7.0		20.0			
4-Chlorotoluene	0.9315 0.8526	0.7597	0.8365	0.8251	0.8497	Ave		0.8425				6.6		20.0			
tert-Butylbenzene	2.1944 2.3365	1.9618	2.1840	2.2589	2.2838	Ave		2.2032				6.0		20.0			
1,2,4-Trimethylbenzene	3.0717 3.0699	2.6361	2.9096	2.9217	2.9663	Ave		2.9292				5.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.9529 3.2166	2.5454	2.9398	3.0428	3.1243	Ave		2.9703				7.8		20.0			
1,3-Dichlorobenzene	1.8134 1.5999	1.5519	1.5482	1.5704	1.5551	Ave		1.6065			0.6000	6.4		20.0			
p-Isopropyltoluene	2.6759 2.8186	2.3165	2.5826	2.6836	2.7180	Ave		2.6325				6.6		20.0			
1,4-Dichlorobenzene	1.9186 1.5931	1.5778	1.5767	1.5533	1.5671	Ave		1.6311			0.5000	8.7		20.0			
n-Butylbenzene	2.4226 2.2797	1.8931	2.0729	2.1667	2.2237	Ave		2.1764				8.3		20.0			
1,2-Dichlorobenzene	1.6093 1.4624	1.3677	1.4397	1.4140	1.4259	Ave		1.4532			0.4000	5.7		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0926	0.0585	0.0810	0.0873	0.0880	Ave		0.0815			0.0500	16.6		20.0			
1,2,4-Trichlorobenzene	1.1622 0.7731	0.6890	0.7259	0.7368	0.7653	Lin1	0.0951	0.7581			0.2000				0.9990		0.9900
Hexachlorobutadiene	+++++ 0.2920	0.3142	0.2602	0.2694	0.2924	Ave		0.2856				7.5		20.0			
Naphthalene	2.0934 1.7538	1.4478	1.5379	1.5801	1.6693	Ave		1.6804				13.6		20.0			
1,2,3-Trichlorobenzene	0.9661 0.6502	0.5768	0.6227	0.6314	0.6337	Lin1	0.0808	0.6372							0.9990		0.9900
Dibromofluoromethane (Surr)	0.2038 0.2452	0.2227	0.2225	0.2387	0.2402	Ave		0.2289				6.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2364 0.2580	0.2230	0.2369	0.2570	0.2561	Ave		0.2446				5.9		20.0			
Toluene-d8 (Surr)	1.4326 1.5541	1.3434	1.3971	1.5040	1.5171	Ave		1.4580				5.5		20.0			
4-Bromofluorobenzene (Surr)	0.5715 0.5667	0.4653	0.5109	0.5567	0.5503	Ave		0.5369				7.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 21:00 Calibration End Date: 09/02/2016 22:56 Calibration ID: 35915

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-245431/13	UXM7652.D
Level 2	STDA9 240-245431/14	UXM7653.D
Level 3	STDA9 240-245431/15	UXM7654.D
Level 4	STDA9 240-245431/16	UXM7655.D
Level 5	STDA9 240-245431/17	UXM7656.D
Level 6	STDA9 240-245431/18	UXM7657.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	0.0309 0.0201	0.0264	0.0202	0.0189	0.0189	Lin1	0.0604	0.0193							0.9990		0.9900
Diisopropyl ether	0.2441 0.2681	0.2586	0.2649	0.2554	0.2627	Ave		0.2590				3.3		20.0			
2-Chloro-1,3-butadiene	0.3775 0.4508	0.3871	0.4203	0.4281	0.4232	Ave		0.4145				6.6		20.0			
Ethyl-t-butyl ether (ETBE)	0.7808 0.8911	0.8600	0.8799	0.8329	0.8658	Ave		0.8517				4.7		20.0			
Propionitrile	0.0197 0.0216	0.0209	0.0216	0.0200	0.0201	Ave		0.0207				4.0		20.0			
Ethyl acetate	0.1350 0.1421	0.1428	0.1442	0.1310	0.1323	Ave		0.1379				4.2		20.0			
Methacrylonitrile	0.0908 0.1067	0.1009	0.1055	0.0989	0.0997	Ave		0.1004				5.6		20.0			
Tert-amyl-methyl ether (TAME)	0.6343 0.7691	0.7463	0.7519	0.7195	0.7455	Ave		0.7278				6.7		20.0			
n-Butanol	+++++ 0.0034	0.0029	0.0031	0.0029	0.0029	Ave		0.0030				6.9		20.0			
Ethyl acrylate	0.1597 0.2085	0.1845	0.2047	0.1908	0.1912	Ave		0.1899				9.1		20.0			
Methyl methacrylate	0.1292 0.1550	0.1388	0.1499	0.1400	0.1451	Ave		0.1430				6.4		20.0			
2-Nitropropane	+++++ 0.0399	0.0362	0.0381	0.0361	0.0371	Ave		0.0375				4.2		20.0			
n-Butyl acetate	0.2087 0.2510	0.2253	0.2404	0.2273	0.2374	Ave		0.2317				6.3		20.0			
1-Chlorohexane	+++++ 0.4747	0.4445	0.4201	0.4490	0.4155	Ave		0.4408				5.4		20.0			
Cyclohexanone	+++++ 0.0105	0.0070	0.0101	0.0094	0.0097	Ave		0.0093				14.7		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.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 21:00 Calibration End Date: 09/02/2016 22:56 Calibration ID: 35915

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	2.6357 3.1348	2.7770	2.9731	2.9790	3.0674	Ave		2.9278				6.4		20.0			
1,3,5-Trichlorobenzene	0.8383 0.9108	0.8447	0.8613	0.8684	0.8527	Ave		0.8627				3.0		20.0			
2-Methylnaphthalene	+++++ 0.9506	0.6627	0.8009	0.8378	0.9045	Ave		0.8313				13.3		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.: 240-70005-1 Analy Batch No.: 245670

SDG No.:

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

Calibration Start Date: 09/06/2016 18:05 Calibration End Date: 09/06/2016 20:18 Calibration ID: 35918

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	DOWSTD 240-245670/9	UXM7672.D
Level 2	DOWSTD 240-245670/10	UXM7673.D
Level 3	DOWSTD 240-245670/11	UXM7674.D
Level 4	DOWSTD 240-245670/12	UXM7675.D
Level 5	DOWSTD 240-245670/13	UXM7676.D
Level 6	DOWSTD 240-245670/14	UXM7677.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								
Ethylene oxide	0.0288 0.0307	0.0344	0.0278	0.0329	0.0327	Lin1	-0.075	0.0318							0.9930		0.9900
Propene oxide	0.0333 0.0345	0.0341	0.0342	0.0365	0.0368	Lin1	-0.057	0.0359							0.9980		0.9900
1,4-Dioxane	0.0007 0.0011	0.0008	0.0009	0.0015	0.0014	Ave		0.0011				29.1	*	20.0			
Epichlorohydrin	0.0089 0.0093	0.0089	0.0091	0.0100	0.0097	Lin1	-0.020	0.0097							0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 20:38 Calibration End Date: 08/24/2016 22:37 Calibration ID: 35810

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-244166/8	UX958010.D
Level 2	STD8260 240-244166/9	UX958011.D
Level 3	STD8260 240-244166/10	UX958012.D
Level 4	ICIS 240-244166/11	UX958013.D
Level 5	STD8260 240-244166/12	UX958014.D
Level 6	STD8260 240-244166/13	UX958015.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	0.3325 0.4365	0.4674	0.5230	0.4800	0.4239	Ave		0.4439			0.1000	14.6		20.0			
Chloromethane	0.4429 0.4050	0.4339	0.4567	0.4209	0.4227	Ave		0.4304			0.1000	4.2		20.0			
Vinyl chloride	0.5156 0.4507	0.4120	0.5115	0.4692	0.4496	Ave		0.4681			0.1000	8.5		20.0			
Butadiene	0.4312 0.3888	0.4247	0.4517	0.4316	0.3733	Ave		0.4169				7.1		20.0			
Bromomethane	0.3554 0.5252	0.2903	0.3807	0.3765	0.4189	Ave		0.3912			0.0500	20.0		20.0			
Chloroethane	0.4039 0.3751	0.3128	0.3531	0.3744	0.3706	Ave		0.3650			0.0500	8.3		20.0			
Dichlorofluoromethane	0.8536 0.8551	0.8364	0.8756	0.8622	0.8355	Ave		0.8531				1.8		20.0			
Trichlorofluoromethane	0.3591 0.7559	0.6817	0.8331	0.8511	0.7642	Lin1	-0.135	0.7793			0.1000				0.9970		0.9900
Ethyl ether	0.3632 0.3285	0.3445	0.3387	0.3212	0.3225	Ave		0.3364				4.7		20.0			
Acrolein	0.0719 0.0648	0.0644	0.0654	0.0597	0.0601	Ave		0.0644				6.9		20.0			
Acetone	+++++ 0.1049	0.1946	0.1132	0.1030	0.1036	Lin1	0.1802	0.1025			0.0100				1.0000		0.9900
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.4217 0.4188	0.4470	0.4636	0.4570	0.4038	Ave		0.4353			0.0500	5.5		20.0			
1,1-Dichloroethene	0.6929 0.7047	0.7562	0.7298	0.7073	0.6766	Ave		0.7113			0.1000	4.0		20.0			
Iodomethane	0.7651 0.7835	0.7780	0.7642	0.7591	0.7601	Ave		0.7683				1.3		20.0			
Carbon disulfide	1.5899 1.4646	0.9187	1.4060	1.3894	1.3815	Ave		1.3583			0.1000	16.9		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.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 20:38 Calibration End Date: 08/24/2016 22:37 Calibration ID: 35810

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	0.4566 0.3464	0.4644	0.3925	0.3817	0.4262	Ave		0.4113				11.2		20.0			
Methyl acetate	0.3014 0.2524	0.2594	0.2641	0.2582	0.2479	Ave		0.2639			0.1000	7.3		20.0			
Methylene Chloride	+++++ 0.5171	0.8514	0.5654	0.5264	0.5063	Lin1	0.3544	0.5092			0.1000				1.0000		0.9900
tert-Butyl alcohol	0.0388 0.0412	0.0370	0.0432	0.0384	0.0404	Ave		0.0398				5.5		20.0			
Acrylonitrile	0.1342 0.1406	0.1317	0.1384	0.1323	0.1359	Ave		0.1355				2.6		20.0			
Methyl tert-butyl ether	1.0533 1.3124	1.0744	1.2303	1.2034	1.1825	Ave		1.1760			0.1000	8.3		20.0			
trans-1,2-Dichloroethene	0.4523 0.4880	0.4992	0.4738	0.4765	0.4579	Ave		0.4746			0.1000	3.7		20.0			
Hexane	+++++ 0.3317	0.3783	0.3574	0.3651	0.3094	Ave		0.3484				7.9		20.0			
1,1-Dichloroethane	0.5266 0.6159	0.6936	0.6387	0.6117	0.6009	Ave		0.6146			0.2000	8.8		20.0			
Vinyl acetate	0.5069 0.6189	0.5214	0.5889	0.5424	0.5622	Ave		0.5568				7.6		20.0			
2-Butanone	0.1196 0.1430	0.1421	0.1459	0.1331	0.1396	Ave		0.1372			0.0100	7.0		20.0			
cis-1,2-Dichloroethene	0.5832 0.5059	0.4990	0.5284	0.4908	0.5001	Ave		0.5179			0.1000	6.6		20.0			
2,2-Dichloropropane	0.2987 0.2733	0.2164	0.3216	0.3026	0.2782	Ave		0.2818				13.0		20.0			
Bromochloromethane	0.2680 0.2781	0.2978	0.2981	0.2697	0.2717	Ave		0.2805				5.0		20.0			
Tetrahydrofuran	+++++ 0.0987	0.1000	0.1030	0.0898	0.0931	Ave		0.0969				5.5		20.0			
Chloroform	0.6355 0.6675	0.6396	0.6983	0.6677	0.6464	Ave		0.6592			0.2000	3.6		20.0			
1,1,1-Trichloroethane	0.4952 0.4940	0.4942	0.5105	0.4900	0.4799	Ave		0.4939			0.1000	2.0		20.0			
Cyclohexane	0.5130 0.5062	0.5557	0.5408	0.5560	0.4639	Ave		0.5226			0.1000	6.8		20.0			
1,1-Dichloropropene	0.5843 0.4768	0.4907	0.5103	0.5162	0.4814	Ave		0.5099				7.8		20.0			
Carbon tetrachloride	0.4311 0.4493	0.4248	0.4481	0.4471	0.4267	Ave		0.4378			0.1000	2.6		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.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 20:38 Calibration End Date: 08/24/2016 22:37 Calibration ID: 35810

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	0.0029 0.0074	0.0063	0.0059	0.0057	0.0064	Lin1	-0.050	0.0068							0.9910		0.9900
1,2-Dichloroethane	0.5035 0.5504	0.5314	0.5532	0.5439	0.5332	Ave		0.5359			0.1000	3.4		20.0			
Benzene	1.4737 1.5473	1.3719	1.6084	1.5571	1.5233	Ave		1.5136			0.5000	5.4		20.0			
n-Heptane	+++++ 0.2031	0.3753	0.2434	0.2369	0.2051	Lin1	0.1999	0.2053							0.9970		0.9900
Trichloroethene	0.5534 0.4274	0.3730	0.4560	0.4492	0.4240	Ave		0.4471			0.1500	13.3		20.0			
Methylcyclohexane	0.6296 0.4772	0.4422	0.5106	0.5339	0.4797	Ave		0.5122			0.1000	12.8		20.0			
1,2-Dichloropropane	0.2436 0.3357	0.3271	0.3503	0.3321	0.3292	Ave		0.3197			0.1000	11.9		20.0			
1,4-Dioxane	+++++ 0.0045	0.0063	0.0051	0.0042	0.0049	Ave		0.0050				16.1		20.0			
Dibromomethane	+++++ 0.2907	0.2757	0.3098	0.2884	0.2804	Ave		0.2890				4.5		20.0			
Bromodichloromethane	0.4129 0.4862	0.4002	0.4615	0.4589	0.4756	Ave		0.4492			0.1500	7.7		20.0			
2-Chloroethyl vinyl ether	0.1742 0.2468	0.1696	0.2270	0.2346	0.2373	Ave		0.2149				15.8		20.0			
cis-1,3-Dichloropropene	0.3849 0.6086	0.4307	0.5635	0.5551	0.5811	Ave		0.5206			0.1500	17.4		20.0			
4-Methyl-2-pentanone	0.2560 0.3182	0.2418	0.3121	0.3073	0.3017	Ave		0.2895			0.0500	11.1		20.0			
Toluene	2.0994 2.0703	2.1808	2.1843	2.1318	2.1075	Ave		2.1290			0.4000	2.2		20.0			
trans-1,3-Dichloropropene	0.5127 0.6825	0.5579	0.5770	0.6331	0.6331	Ave		0.5994			0.1000	10.3		20.0			
Ethyl methacrylate	0.4550 0.5989	0.3947	0.4891	0.5138	0.5425	Ave		0.4990				14.2		20.0			
1,1,2-Trichloroethane	0.3783 0.4587	0.4352	0.4523	0.4446	0.4325	Ave		0.4336			0.1000	6.7		20.0			
1,3-Dichloropropane	0.7205 0.7786	0.7679	0.7631	0.7602	0.7497	Ave		0.7567				2.7		20.0			
Tetrachloroethene	0.6001 0.4944	0.5167	0.5461	0.5132	0.4920	Ave		0.5271			0.1500	7.7		20.0			
2-Hexanone	0.1354 0.2609	0.1922	0.2389	0.2435	0.2461	Lin1	-0.134	0.2550			0.0500				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.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 20:38 Calibration End Date: 08/24/2016 22:37 Calibration ID: 35810

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	0.3309 0.4444	0.3225	0.3775	0.3841	0.4094	Ave		0.3781				12.3		20.0			
1,2-Dibromoethane	0.3516 0.4676	0.4835	0.4526	0.4356	0.4515	Ave		0.4404				10.5		20.0			
Chlorobenzene	1.6248 1.4245	1.3719	1.5059	1.4255	1.4457	Ave		1.4664			0.3000	6.1		20.0			
1,1,1,2-Tetrachloroethane	0.4159 0.4999	0.4021	0.4471	0.4411	0.4636	Ave		0.4450				7.8		20.0			
Ethylbenzene	0.7314 0.7522	0.6742	0.7788	0.7465	0.7536	Ave		0.7394				4.8		20.0			
m-Xylene & p-Xylene	0.9526 0.9531	0.7910	0.9958	0.9299	0.9387	Ave		0.9269				7.6		20.0			
o-Xylene	0.8749 0.9866	0.9162	0.9805	0.9785	0.9568	Ave		0.9489				4.7		20.0			
Styrene	1.2063 1.7166	1.3284	1.5880	1.6030	1.6347	Ave		1.5128			0.3000	13.2		20.0			
Bromoform	0.0521 +++++	0.1438	0.1816	0.1873	0.2237	Lin1	-0.084	0.2112			0.1000				0.9930		0.9900
Isopropylbenzene	2.0289 2.3014	2.0859	2.2974	2.3144	2.2499	Ave		2.2130			0.1000	5.6		20.0			
1,1,2,2-Tetrachloroethane	1.0631 0.9391	0.8408	0.9831	0.9586	0.9048	Ave		0.9483			0.3000	7.9		20.0			
Bromobenzene	1.3267 0.9831	1.1361	1.0720	1.0773	1.0109	Ave		1.1010				11.2		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2250	0.0996	0.1525	0.1901	0.1966	Lin1	-0.169	0.2128							0.9920		0.9900
1,2,3-Trichloropropane	0.4059 0.3625	0.3809	0.3848	0.3713	0.3701	Ave		0.3792				4.0		20.0			
n-Propylbenzene	1.0510 0.9667	0.9199	1.1161	1.0561	0.9950	Ave		1.0175				6.9		20.0			
2-Chlorotoluene	1.0253 0.8748	1.0010	0.9558	0.9551	0.8942	Ave		0.9510				6.1		20.0			
1,3,5-Trimethylbenzene	3.0242 3.0038	2.5846	3.1553	3.2034	3.0251	Ave		2.9994				7.3		20.0			
4-Chlorotoluene	1.1078 0.9618	1.0058	1.0937	1.0615	0.9768	Ave		1.0346				6.0		20.0			
tert-Butylbenzene	2.6387 2.6570	2.5577	2.8044	2.8765	2.6442	Ave		2.6964				4.4		20.0			
1,2,4-Trimethylbenzene	3.1578 3.2157	3.1008	3.3576	3.3900	3.2216	Ave		3.2406				3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 20:38 Calibration End Date: 08/24/2016 22:37 Calibration ID: 35810

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	0.7295 0.7900	0.7747	0.8757	0.8563	0.7757	Ave		0.8003				6.9		20.0			
1,3-Dichlorobenzene	2.4670 1.9948	2.0546	2.1878	2.0812	1.9637	Ave		2.1248			0.6000	8.7		20.0			
p-Isopropyltoluene	3.1311 3.2747	3.0485	3.4094	3.4346	3.2152	Ave		3.2523				4.7		20.0			
1,4-Dichlorobenzene	2.6839 2.0553	2.2471	2.2230	2.1253	2.0435	Ave		2.2297			0.5000	10.7		20.0			
n-Butylbenzene	3.0597 2.6033	2.6753	2.6939	2.8316	2.5791	Ave		2.7405				6.6		20.0			
1,2-Dichlorobenzene	2.2461 1.9608	1.8533	2.0777	2.0360	1.9472	Ave		2.0202			0.4000	6.7		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.2052	0.0736	0.1670	0.1764	0.2044	Lin1	-0.159	0.2030			0.0500				0.9970		0.9900
1,2,4-Trichlorobenzene	1.7822 1.1682	1.3162	1.2577	1.2734	1.2091	Ave		1.3344			0.2000	16.9		20.0			
Hexachlorobutadiene	0.8065 0.4161	0.6656	0.4804	0.5066	0.4266	Lin1	0.2284	0.4290							0.9950		0.9900
Naphthalene	4.0863 3.4759	3.1286	3.5532	3.6758	3.5877	Ave		3.5846				8.7		20.0			
1,2,3-Trichlorobenzene	1.7563 1.1311	1.3109	1.2335	1.2222	1.1900	Ave		1.3074				17.4		20.0			
Dibromofluoromethane (Surr)	+++++ 0.3611	0.3753	0.3795	0.3809	0.3547	Ave		0.3703				3.2		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.4632	0.4751	0.4713	0.4526	0.4282	Ave		0.4581				4.1		20.0			
Toluene-d8 (Surr)	+++++ 1.8019	1.9386	1.8152	1.8517	1.8030	Ave		1.8421				3.1		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.6813	0.7114	0.6942	0.6565	0.6616	Ave		0.6810				3.3		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.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 23:25 Calibration End Date: 08/25/2016 01:25 Calibration ID: 35813

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-244166/15	UX958017.D
Level 2	STDA9 240-244166/16	UX958018.D
Level 3	STDA9 240-244166/17	UX958019.D
Level 4	STDA9 240-244166/18	UX958020.D
Level 5	STDA9 240-244166/19	UX958021.D
Level 6	STDA9 240-244166/20	UX958022.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	+++++ 0.0413	0.0608	0.0426	0.0412	0.0425	Ave		0.0457				18.5		20.0			
Diisopropyl ether	0.3696 0.3570	0.3308	0.3459	0.3585	0.3598	Ave		0.3536				3.8		20.0			
2-Chloro-1,3-butadiene	0.5915 0.5214	0.4313	0.5273	0.5048	0.5325	Ave		0.5181				10.0		20.0			
Ethyl-t-butyl ether (ETBE)	0.9357 1.1169	0.9467	1.1083	1.0524	1.1077	Ave		1.0446				8.0		20.0			
Ethyl acetate	0.3296 0.3079	0.3057	0.3176	0.2970	0.3110	Ave		0.3115				3.6		20.0			
Propionitrile	0.0521 0.0525	0.0484	0.0516	0.0505	0.0531	Ave		0.0514				3.3		20.0			
Methacrylonitrile	0.2057 0.2233	0.1719	0.2124	0.2077	0.2235	Ave		0.2074				9.2		20.0			
Tert-amyl-methyl ether (TAME)	0.8699 1.2699	1.0832	1.1675	1.1799	1.2553	Ave		1.1376				13.0		20.0			
n-Butanol	+++++ 0.0057	0.0040	0.0047	0.0046	0.0058	Ave		0.0049				15.8		20.0			
Ethyl acrylate	0.4476 0.4507	0.3360	0.3942	0.4048	0.4347	Ave		0.4113				10.5		20.0			
Methyl methacrylate	0.2095 0.3224	0.2576	0.2925	0.2840	0.3248	Ave		0.2818				15.4		20.0			
2-Nitropropane	+++++ 0.0379	0.0388	0.0392	0.0368	0.0391	Ave		0.0384				2.7		20.0			
n-Butyl acetate	0.5446 0.5549	0.4626	0.5035	0.5175	0.5454	Ave		0.5214				6.7		20.0			
1-Chlorohexane	+++++ 0.5958	0.5856	0.5646	0.5680	0.5882	Ave		0.5804				2.3		20.0			
Cyclohexanone	+++++ 0.0258	0.0207	0.0224	0.0238	0.0250	Ave		0.0235				8.7		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.: 240-70005-1 Analy Batch No.: 244166

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/24/2016 23:25 Calibration End Date: 08/25/2016 01:25 Calibration ID: 35813

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	2.6427 3.9222	3.0439	3.6295	3.8264	3.8961	Ave		3.4935				15.2		20.0			
1,3,5-Trichlorobenzene	1.1140 1.5450	1.3148	1.4770	1.5001	1.5287	Ave		1.4133				11.9		20.0			
2-Methylnaphthalene	+++++ 2.6985	1.3435	1.9277	2.2271	2.5230	Lin1	-3.773	2.5920							0.9940		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-245431/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.2946	0.1000	0.0212	0.0200	5.9	20.0
Chloromethane	Ave	0.3817	0.3579	0.1000	0.0188	0.0200	-6.2	20.0
Vinyl chloride	Ave	0.3553	0.3449	0.1000	0.0194	0.0200	-2.9	20.0
Butadiene	Ave	0.3341	0.3114		0.0186	0.0200	-6.8	30.0
Bromomethane	Ave	0.1902	0.1762	0.0500	0.0185	0.0200	-7.4	20.0
Chloroethane	Ave	0.2108	0.2032	0.0500	0.0193	0.0200	-3.6	20.0
Dichlorofluoromethane	Ave	0.4995	0.4743		0.0190	0.0200	-5.1	20.0
Trichlorofluoromethane	Ave	0.3346	0.3314	0.1000	0.0198	0.0200	-0.9	20.0
Ethyl ether	Ave	0.1940	0.1870		0.0193	0.0200	-3.6	20.0
Acrolein	Ave	0.0291	0.0285		0.0980	0.100	-2.0	50.0
1,1-Dichloroethene	Ave	0.2383	0.2532	0.1000	0.0212	0.0200	6.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1513	0.1743	0.0500	0.0230	0.0200	15.2	20.0
Acetone	Lin1		0.0445	0.0100	0.0382	0.0400	-4.4	50.0
Iodomethane	Ave	0.3898	0.4036		0.0207	0.0200	3.5	20.0
Carbon disulfide	Ave	0.8983	0.9347	0.1000	0.0208	0.0200	4.1	20.0
3-Chloro-1-propene	Ave	0.1741	0.1764		0.0203	0.0200	1.3	20.0
Methyl acetate	Ave	0.1139	0.1106	0.1000	0.0971	0.100	-2.9	20.0
Methylene Chloride	Lin1		0.3001	0.1000	0.0189	0.0200	-5.3	50.0
tert-Butyl alcohol	Ave	0.0122	0.0117		0.192	0.200	-4.2	50.0
Acrylonitrile	Ave	0.0594	0.0593		0.199	0.200	-0.3	20.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2902	0.1000	0.0200	0.0200	0.0	20.0
Methyl tert-butyl ether	Ave	0.6719	0.6606	0.1000	0.0197	0.0200	-1.7	20.0
Hexane	Ave	0.2697	0.3269		0.0242	0.0200	21.2*	20.0
1,1-Dichloroethane	Ave	0.5025	0.4762	0.2000	0.0190	0.0200	-5.2	20.0
Vinyl acetate	Ave	0.3605	0.3574		0.0198	0.0200	-0.9	50.0
2,2-Dichloropropane	Ave	0.3696	0.3605		0.0195	0.0200	-2.4	20.0
cis-1,2-Dichloroethene	Ave	0.3095	0.2971	0.1000	0.0192	0.0200	-4.0	20.0
2-Butanone	Ave	0.0621	0.0596	0.0100	0.0384	0.0400	-4.0	20.0
Bromochloromethane	Ave	0.1240	0.1178		0.0190	0.0200	-5.0	20.0
Tetrahydrofuran	Ave	0.0406	0.0406		0.0400	0.0400	-0.0	20.0
Chloroform	Ave	0.4590	0.4308	0.2000	0.0188	0.0200	-6.1	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3778	0.1000	0.0205	0.0200	2.3	20.0
Cyclohexane	Ave	0.4081	0.4727	0.1000	0.0232	0.0200	15.8	20.0
1,1-Dichloropropene	Ave	0.3522	0.3663		0.0208	0.0200	4.0	20.0
Carbon tetrachloride	Ave	0.2894	0.3133	0.1000	0.0216	0.0200	8.2	20.0
Isobutyl alcohol	Ave	0.0038	0.0035		0.467	0.500	-6.6	20.0
Benzene	Ave	1.173	1.123	0.5000	0.0191	0.0200	-4.3	20.0
1,2-Dichloroethane	Ave	0.3058	0.2978	0.1000	0.0195	0.0200	-2.6	20.0
n-Heptane	Lin1		0.1689		0.0247	0.0200	23.7*	20.0
Trichloroethene	Ave	0.2746	0.2737	0.1500	0.0199	0.0200	-0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-245431/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3562	0.3978	0.1000	0.0223	0.0200	11.7	20.0
1,2-Dichloropropane	Ave	0.2672	0.2647	0.1000	0.0198	0.0200	-0.9	20.0
Dibromomethane	Ave	0.1201	0.1171		0.0195	0.0200	-2.5	20.0
1,4-Dioxane	Ave	0.0011	0.0009		0.309	0.400	-22.9	50.0
Bromodichloromethane	Ave	0.3207	0.3032	0.1500	0.0189	0.0200	-5.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1155		0.0202	0.0200	1.0	20.0
cis-1,3-Dichloropropene	Ave	0.4166	0.4069	0.1500	0.0195	0.0200	-2.3	20.0
4-Methyl-2-pentanone	Ave	0.1353	0.1405	0.0500	0.0415	0.0400	3.9	20.0
Toluene	Ave	1.710	1.667	0.4000	0.0195	0.0200	-2.5	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4393	0.1000	0.0188	0.0200	-6.0	20.0
Ethyl methacrylate	Ave	0.3327	0.3487		0.0210	0.0200	4.8	20.0
1,1,2-Trichloroethane	Ave	0.2527	0.2490	0.1000	0.0197	0.0200	-1.5	20.0
1,3-Dichloropropane	Ave	0.4765	0.4654		0.0195	0.0200	-2.3	20.0
Tetrachloroethene	Ave	0.2755	0.2793	0.1500	0.0203	0.0200	1.4	20.0
2-Hexanone	Ave	0.1213	0.1249	0.0500	0.0412	0.0400	2.9	20.0
Dibromochloromethane	Ave	0.2742	0.2707		0.0197	0.0200	-1.3	20.0
1,2-Dibromoethane	Ave	0.2382	0.2432		0.0204	0.0200	2.1	20.0
Chlorobenzene	Ave	1.096	1.020	0.3000	0.0186	0.0200	-6.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3334		0.0192	0.0200	-3.8	20.0
Ethylbenzene	Ave	0.5760	0.5612		0.0195	0.0200	-2.6	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.7013		0.0194	0.0200	-2.9	20.0
o-Xylene	Ave	0.7391	0.6910		0.0187	0.0200	-6.5	20.0
Styrene	Ave	1.192	1.151	0.3000	0.0193	0.0200	-3.5	20.0
Bromoform	Ave	0.1392	0.1448	0.1000	0.0208	0.0200	4.0	20.0
Isopropylbenzene	Ave	1.733	1.698	0.1000	0.0196	0.0200	-2.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.5729	0.3000	0.0204	0.0200	2.2	20.0
Bromobenzene	Ave	0.7889	0.7696		0.0195	0.0200	-2.5	20.0
1,2,3-Trichloropropane	Ave	0.1474	0.1684		0.0229	0.0200	14.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1489		0.0198	0.0200	-1.0	20.0
n-Propylbenzene	Ave	0.8625	0.8636		0.0200	0.0200	0.1	20.0
2-Chlorotoluene	Ave	0.7917	0.7546		0.0191	0.0200	-4.7	20.0
1,3,5-Trimethylbenzene	Ave	2.724	2.643		0.0194	0.0200	-3.0	20.0
4-Chlorotoluene	Ave	0.8425	0.8074		0.0192	0.0200	-4.2	20.0
tert-Butylbenzene	Ave	2.203	2.122		0.0193	0.0200	-3.7	20.0
1,2,4-Trimethylbenzene	Ave	2.929	2.756		0.0188	0.0200	-5.9	20.0
sec-Butylbenzene	Ave	2.970	2.894		0.0195	0.0200	-2.6	20.0
1,3-Dichlorobenzene	Ave	1.606	1.477	0.6000	0.0184	0.0200	-8.1	20.0
p-Isopropyltoluene	Ave	2.633	2.522		0.0192	0.0200	-4.2	20.0
1,4-Dichlorobenzene	Ave	1.631	1.505	0.5000	0.0185	0.0200	-7.7	20.0
n-Butylbenzene	Ave	2.176	1.997		0.0183	0.0200	-8.3	20.0
1,2-Dichlorobenzene	Ave	1.453	1.383	0.4000	0.0190	0.0200	-4.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-245431/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0815	0.0939	0.0500	0.0230	0.0200	15.2	50.0
1,2,4-Trichlorobenzene	Lin1		0.7127	0.2000	0.0187	0.0200	-6.6	50.0
Hexachlorobutadiene	Ave	0.2856	0.2529		0.0177	0.0200	-11.5	20.0
Naphthalene	Ave	1.680	1.646		0.0196	0.0200	-2.0	50.0
1,2,3-Trichlorobenzene	Lin1		0.5985		0.0187	0.0200	-6.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2051		0.0179	0.0200	-10.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2213		0.0181	0.0200	-9.5	20.0
Toluene-d8 (Surr)	Ave	1.458	1.318		0.0181	0.0200	-9.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.4819		0.0179	0.0200	-10.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-245431/21 Calibration Date: 09/03/2016 00:05

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7660.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2289	0.2103		0.0184	0.0200	-8.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2304		0.0188	0.0200	-5.8	20.0
Toluene-d8 (Surr)	Ave	1.458	1.379		0.0189	0.0200	-5.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.4959		0.0185	0.0200	-7.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-245431/21 Calibration Date: 09/03/2016 00:05

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 21:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 22:56

Lab File ID: UXM7660.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	Lin1		0.0194		0.197	0.200	-1.5	20.0
Diisopropyl ether	Ave	0.2590	0.2743		0.0212	0.0200	5.9	20.0
2-Chloro-1,3-butadiene	Ave	0.4145	0.4423		0.0213	0.0200	6.7	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8517	0.8783		0.0206	0.0200	3.1	20.0
Propionitrile	Ave	0.0207	0.0203		0.196	0.200	-1.8	20.0
Ethyl acetate	Ave	0.1379	0.1395		0.0405	0.0400	1.1	50.0
Methacrylonitrile	Ave	0.1004	0.1012		0.202	0.200	0.8	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7278	0.7460		0.0205	0.0200	2.5	20.0
n-Butanol	Ave	0.0030	0.0029		0.474	0.500	-5.1	20.0
Methyl methacrylate	Ave	0.1430	0.1500		0.0420	0.0400	4.9	20.0
2-Nitropropane	Ave	0.0375	0.0367		0.0392	0.0400	-2.1	20.0
1-Chlorohexane	Ave	0.4408	0.4634		0.0210	0.0200	5.1	20.0
Cyclohexanone	Ave	0.0093	0.0097		0.208	0.200	4.1	20.0
1,2,3-Trimethylbenzene	Ave	2.928	3.162		0.0216	0.0200	8.0	20.0
1,3,5-Trichlorobenzene	Ave	0.8627	0.8902		0.0206	0.0200	3.2	20.0
2-Methylnaphthalene	Ave	0.8313	0.8361		0.0402	0.0400	0.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250232/3 Calibration Date: 10/06/2016 16:12

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM8431.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.3255	0.1000	0.0234	0.0200	17.0	20.0
Chloromethane	Ave	0.3817	0.3464	0.1000	0.0182	0.0200	-9.2	20.0
Vinyl chloride	Ave	0.3553	0.3357	0.1000	0.0189	0.0200	-5.5	20.0
Butadiene	Ave	0.3341	0.3218		0.0193	0.0200	-3.7	20.0
Bromomethane	Ave	0.1902	0.1614	0.0500	0.0170	0.0200	-15.1	20.0
Chloroethane	Ave	0.2108	0.1903	0.0500	0.0181	0.0200	-9.7	20.0
Dichlorofluoromethane	Ave	0.4995	0.4243		0.0170	0.0200	-15.1	20.0
Trichlorofluoromethane	Ave	0.3346	0.3550	0.1000	0.0212	0.0200	6.1	20.0
Ethyl ether	Ave	0.1940	0.1971		0.0203	0.0200	1.6	20.0
Acrolein	Ave	0.0291	0.0223		0.0767	0.100	-23.3	50.0
1,1-Dichloroethene	Ave	0.2383	0.2479	0.1000	0.0208	0.0200	4.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1513	0.2036	0.0500	0.0269	0.0200	34.6*	20.0
Acetone	Lin1		0.0537	0.0100	0.0469	0.0400	17.2	50.0
Iodomethane	Ave	0.3898	0.3978		0.0204	0.0200	2.0	20.0
Carbon disulfide	Ave	0.8983	0.8357	0.1000	0.0186	0.0200	-7.0	20.0
3-Chloro-1-propene	Ave	0.1741	0.1717		0.0197	0.0200	-1.4	20.0
Methyl acetate	Ave	0.1139	0.1368	0.1000	0.120	0.100	20.1*	20.0
Methylene Chloride	Lin1		0.2843	0.1000	0.0179	0.0200	-10.6	50.0
tert-Butyl alcohol	Ave	0.0122	0.0149		0.244	0.200	22.2	50.0
Acrylonitrile	Ave	0.0594	0.0769		0.259	0.200	29.3*	20.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2883	0.1000	0.0199	0.0200	-0.6	20.0
Methyl tert-butyl ether	Ave	0.6719	0.6852	0.1000	0.0204	0.0200	2.0	20.0
Hexane	Ave	0.2697	0.3458		0.0256	0.0200	28.2*	20.0
1,1-Dichloroethane	Ave	0.5025	0.4793	0.2000	0.0191	0.0200	-4.6	20.0
Vinyl acetate	Ave	0.3605	0.3268		0.0181	0.0200	-9.4	50.0
2,2-Dichloropropane	Ave	0.3696	0.3193		0.0173	0.0200	-13.6	20.0
2-Butanone	Ave	0.0621	0.0725	0.0100	0.0468	0.0400	16.9	20.0
cis-1,2-Dichloroethene	Ave	0.3095	0.2997	0.1000	0.0194	0.0200	-3.2	20.0
Bromochloromethane	Ave	0.1240	0.1347		0.0217	0.0200	8.6	20.0
Tetrahydrofuran	Ave	0.0406	0.0478		0.0471	0.0400	17.7	20.0
Chloroform	Ave	0.4590	0.4311	0.2000	0.0188	0.0200	-6.1	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3619	0.1000	0.0196	0.0200	-2.0	20.0
Cyclohexane	Ave	0.4081	0.4785	0.1000	0.0234	0.0200	17.2	20.0
1,1-Dichloropropene	Ave	0.3522	0.3728		0.0212	0.0200	5.9	20.0
Carbon tetrachloride	Ave	0.2894	0.3144	0.1000	0.0217	0.0200	8.6	20.0
Isobutyl alcohol	Ave	0.0038	0.0048		0.636	0.500	27.2*	20.0
1,2-Dichloroethane	Ave	0.3058	0.2955	0.1000	0.0193	0.0200	-3.4	20.0
Benzene	Ave	1.173	1.118	0.5000	0.0191	0.0200	-4.7	20.0
n-Heptane	Lin1		0.1719		0.0253	0.0200	26.4*	20.0
Trichloroethene	Ave	0.2746	0.2841	0.1500	0.0207	0.0200	3.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250232/3 Calibration Date: 10/06/2016 16:12

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM8431.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3562	0.4300	0.1000	0.0241	0.0200	20.7*	20.0
1,2-Dichloropropane	Ave	0.2672	0.2438	0.1000	0.0183	0.0200	-8.7	20.0
Dibromomethane	Ave	0.1201	0.1272		0.0212	0.0200	5.9	20.0
Bromodichloromethane	Ave	0.3207	0.2986	0.1500	0.0186	0.0200	-6.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1225		0.0429	0.0400	7.2	20.0
cis-1,3-Dichloropropene	Ave	0.4166	0.3858	0.1500	0.0185	0.0200	-7.4	20.0
4-Methyl-2-pentanone	Ave	0.1353	0.1449	0.0500	0.0429	0.0400	7.1	20.0
Toluene	Ave	1.710	1.592	0.4000	0.0186	0.0200	-6.9	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4475	0.1000	0.0192	0.0200	-4.2	20.0
Ethyl methacrylate	Ave	0.3327	0.3519		0.0212	0.0200	5.8	20.0
1,1,2-Trichloroethane	Ave	0.2527	0.2677	0.1000	0.0212	0.0200	5.9	20.0
1,3-Dichloropropane	Ave	0.4765	0.4847		0.0203	0.0200	1.7	20.0
Tetrachloroethene	Ave	0.2755	0.3024	0.1500	0.0220	0.0200	9.8	20.0
2-Hexanone	Ave	0.1213	0.1293	0.0500	0.0426	0.0400	6.6	20.0
Dibromochloromethane	Ave	0.2742	0.3009		0.0220	0.0200	9.8	20.0
1,2-Dibromoethane	Ave	0.2382	0.2619		0.0220	0.0200	10.0	20.0
Chlorobenzene	Ave	1.096	1.018	0.3000	0.0186	0.0200	-7.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3465		0.0200	0.0200	-0.0	20.0
Ethylbenzene	Ave	0.5760	0.5541		0.0192	0.0200	-3.8	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.7023		0.0194	0.0200	-2.8	20.0
o-Xylene	Ave	0.7391	0.6961		0.0188	0.0200	-5.8	20.0
Styrene	Ave	1.192	1.173	0.3000	0.0197	0.0200	-1.6	20.0
Bromoform	Ave	0.1392	0.1795	0.1000	0.0258	0.0200	28.9*	20.0
Isopropylbenzene	Ave	1.733	1.678	0.1000	0.0194	0.0200	-3.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.6105	0.3000	0.0218	0.0200	8.9	20.0
Bromobenzene	Ave	0.7889	0.7527		0.0191	0.0200	-4.6	20.0
1,2,3-Trichloropropane	Ave	0.1474	0.1876		0.0255	0.0200	27.3*	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1661		0.0221	0.0200	10.4	20.0
n-Propylbenzene	Ave	0.8625	0.8124		0.0188	0.0200	-5.8	20.0
2-Chlorotoluene	Ave	0.7917	0.7154		0.0181	0.0200	-9.6	20.0
1,3,5-Trimethylbenzene	Ave	2.724	2.416		0.0177	0.0200	-11.3	20.0
4-Chlorotoluene	Ave	0.8425	0.7487		0.0178	0.0200	-11.1	20.0
tert-Butylbenzene	Ave	2.203	1.996		0.0181	0.0200	-9.4	20.0
1,2,4-Trimethylbenzene	Ave	2.929	2.524		0.0172	0.0200	-13.8	20.0
sec-Butylbenzene	Ave	2.970	2.671		0.0180	0.0200	-10.1	20.0
1,3-Dichlorobenzene	Ave	1.606	1.428	0.6000	0.0178	0.0200	-11.1	20.0
p-Isopropyltoluene	Ave	2.633	2.361		0.0179	0.0200	-10.3	20.0
1,4-Dichlorobenzene	Ave	1.631	1.462	0.5000	0.0179	0.0200	-10.4	20.0
n-Butylbenzene	Ave	2.176	1.860		0.0171	0.0200	-14.6	20.0
1,2-Dichlorobenzene	Ave	1.453	1.356	0.4000	0.0187	0.0200	-6.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0815	0.1072	0.0500	0.0263	0.0200	31.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250232/3 Calibration Date: 10/06/2016 16:12

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM8431.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Lin1		0.7701	0.2000	0.0202	0.0200	1.0	50.0
Hexachlorobutadiene	Ave	0.2856	0.2762		0.0193	0.0200	-3.3	20.0
Naphthalene	Ave	1.680	1.891		0.0225	0.0200	12.5	50.0
1,2,3-Trichlorobenzene	Lin1		0.6853		0.0214	0.0200	6.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2224		0.0194	0.0200	-2.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2342		0.0192	0.0200	-4.2	20.0
Toluene-d8 (Surr)	Ave	1.458	1.336		0.0183	0.0200	-8.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.5090		0.0190	0.0200	-5.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250232/3 Calibration Date: 10/06/2016 16:12

Instrument ID: A3UX16 Calib Start Date: 09/06/2016 18:05

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/06/2016 20:18

Lab File ID: UXM8431.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0011	0.0020		0.720	0.400	80.0*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCV 240-250232/5 Calibration Date: 10/06/2016 16:59

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 21:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 22:56

Lab File ID: UXM8433.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	Lin1		0.0238		0.242	0.200	21.2*	20.0
2-Chloro-1,3-butadiene	Ave	0.4145	0.4426		0.0214	0.0200	6.8	20.0
Diisopropyl ether	Ave	0.2590	0.2549		0.0197	0.0200	-1.6	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8517	0.7996		0.0188	0.0200	-6.1	20.0
Propionitrile	Ave	0.0207	0.0275		0.266	0.200	33.0*	20.0
Ethyl acetate	Ave	0.1379	0.1519		0.0441	0.0400	10.1	50.0
Methacrylonitrile	Ave	0.1004	0.1175		0.234	0.200	17.0	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7278	0.7264		0.0200	0.0200	-0.2	20.0
n-Butanol	Ave	0.0030	0.0038		0.623	0.500	24.7*	20.0
Methyl methacrylate	Ave	0.1430	0.1446		0.0405	0.0400	1.2	20.0
2-Nitropropane	Ave	0.0375	0.0357		0.0381	0.0400	-4.7	20.0
1-Chlorohexane	Ave	0.4408	0.4712		0.0214	0.0200	6.9	20.0
Cyclohexanone	Ave	0.0093	0.0048		0.102	0.200	-49.2*	20.0
1,2,3-Trimethylbenzene	Ave	2.928	2.770		0.0189	0.0200	-5.4	20.0
1,3,5-Trichlorobenzene	Ave	0.8627	0.8817		0.0204	0.0200	2.2	20.0
2-Methylnaphthalene	Ave	0.8313	0.9741		0.0469	0.0400	17.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250386/2 Calibration Date: 10/07/2016 13:32

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM8480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.3081	0.1000	0.0222	0.0200	10.8	20.0
Chloromethane	Ave	0.3817	0.3447	0.1000	0.0181	0.0200	-9.7	20.0
Vinyl chloride	Ave	0.3553	0.3221	0.1000	0.0181	0.0200	-9.3	20.0
Butadiene	Ave	0.3341	0.3089		0.0185	0.0200	-7.6	20.0
Bromomethane	Ave	0.1902	0.1599	0.0500	0.0168	0.0200	-15.9	20.0
Chloroethane	Ave	0.2108	0.1848	0.0500	0.0175	0.0200	-12.3	20.0
Dichlorofluoromethane	Ave	0.4995	0.4090		0.0164	0.0200	-18.1	20.0
Trichlorofluoromethane	Ave	0.3346	0.3269	0.1000	0.0195	0.0200	-2.3	20.0
Ethyl ether	Ave	0.1940	0.1964		0.0202	0.0200	1.2	20.0
Acrolein	Ave	0.0291	0.0221		0.0758	0.100	-24.2	50.0
1,1-Dichloroethene	Ave	0.2383	0.2374	0.1000	0.0199	0.0200	-0.4	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.1513	0.1765	0.0500	0.0233	0.0200	16.7	20.0
Acetone	Lin1		0.0526	0.0100	0.0459	0.0400	14.7	50.0
Iodomethane	Ave	0.3898	0.3745		0.0192	0.0200	-3.9	20.0
Carbon disulfide	Ave	0.8983	0.7726	0.1000	0.0172	0.0200	-14.0	20.0
3-Chloro-1-propene	Ave	0.1741	0.1625		0.0187	0.0200	-6.7	20.0
Methyl acetate	Ave	0.1139	0.1299	0.1000	0.114	0.100	14.0	20.0
Methylene Chloride	Lin1		0.2745	0.1000	0.0172	0.0200	-13.9	50.0
tert-Butyl alcohol	Ave	0.0122	0.0133		0.218	0.200	9.0	50.0
Acrylonitrile	Ave	0.0594	0.0723		0.243	0.200	21.6*	20.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2779	0.1000	0.0192	0.0200	-4.2	20.0
Methyl tert-butyl ether	Ave	0.6719	0.6444	0.1000	0.0192	0.0200	-4.1	20.0
Hexane	Ave	0.2697	0.3342		0.0248	0.0200	23.9*	20.0
1,1-Dichloroethane	Ave	0.5025	0.4730	0.2000	0.0188	0.0200	-5.9	20.0
Vinyl acetate	Ave	0.3605	0.3279		0.0182	0.0200	-9.0	50.0
cis-1,2-Dichloroethene	Ave	0.3095	0.2950	0.1000	0.0191	0.0200	-4.7	20.0
2,2-Dichloropropane	Ave	0.3696	0.3022		0.0164	0.0200	-18.2	20.0
2-Butanone	Ave	0.0621	0.0713	0.0100	0.0460	0.0400	15.0	20.0
Bromochloromethane	Ave	0.1240	0.1286		0.0207	0.0200	3.7	20.0
Tetrahydrofuran	Ave	0.0406	0.0455		0.0448	0.0400	12.0	20.0
Chloroform	Ave	0.4590	0.4232	0.2000	0.0184	0.0200	-7.8	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3430	0.1000	0.0186	0.0200	-7.1	20.0
Cyclohexane	Ave	0.4081	0.4420	0.1000	0.0217	0.0200	8.3	20.0
1,1-Dichloropropene	Ave	0.3522	0.3612		0.0205	0.0200	2.6	20.0
Carbon tetrachloride	Ave	0.2894	0.2910	0.1000	0.0201	0.0200	0.5	20.0
Isobutyl alcohol	Ave	0.0038	0.0042		0.561	0.500	12.1	20.0
Benzene	Ave	1.173	1.116	0.5000	0.0190	0.0200	-4.8	20.0
1,2-Dichloroethane	Ave	0.3058	0.2963	0.1000	0.0194	0.0200	-3.1	20.0
n-Heptane	Lin1		0.1697		0.0249	0.0200	24.4*	20.0
Trichloroethene	Ave	0.2746	0.2720	0.1500	0.0198	0.0200	-0.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250386/2 Calibration Date: 10/07/2016 13:32

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM8480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3562	0.3944	0.1000	0.0221	0.0200	10.7	20.0
1,2-Dichloropropane	Ave	0.2672	0.2443	0.1000	0.0183	0.0200	-8.6	20.0
Dibromomethane	Ave	0.1201	0.1247		0.0208	0.0200	3.8	20.0
Bromodichloromethane	Ave	0.3207	0.2872	0.1500	0.0179	0.0200	-10.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1191		0.0417	0.0400	4.2	20.0
cis-1,3-Dichloropropene	Ave	0.4166	0.3836	0.1500	0.0184	0.0200	-7.9	20.0
4-Methyl-2-pentanone	Ave	0.1353	0.1406	0.0500	0.0416	0.0400	3.9	20.0
Toluene	Ave	1.710	1.605	0.4000	0.0188	0.0200	-6.1	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4414	0.1000	0.0189	0.0200	-5.5	20.0
Ethyl methacrylate	Ave	0.3327	0.3482		0.0209	0.0200	4.7	20.0
1,1,2-Trichloroethane	Ave	0.2527	0.2713	0.1000	0.0215	0.0200	7.4	20.0
1,3-Dichloropropane	Ave	0.4765	0.4831		0.0203	0.0200	1.4	20.0
Tetrachloroethene	Ave	0.2755	0.2849	0.1500	0.0207	0.0200	3.4	20.0
2-Hexanone	Ave	0.1213	0.1341	0.0500	0.0442	0.0400	10.6	20.0
Dibromochloromethane	Ave	0.2742	0.2830		0.0206	0.0200	3.2	20.0
1,2-Dibromoethane	Ave	0.2382	0.2586		0.0217	0.0200	8.6	20.0
Chlorobenzene	Ave	1.096	1.012	0.3000	0.0185	0.0200	-7.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3314		0.0191	0.0200	-4.4	20.0
Ethylbenzene	Ave	0.5760	0.5508		0.0191	0.0200	-4.4	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.6850		0.0190	0.0200	-5.2	20.0
o-Xylene	Ave	0.7391	0.6930		0.0188	0.0200	-6.2	20.0
Styrene	Ave	1.192	1.157	0.3000	0.0194	0.0200	-2.9	20.0
Bromoform	Ave	0.1392	0.1562	0.1000	0.0224	0.0200	12.2	20.0
Isopropylbenzene	Ave	1.733	1.625	0.1000	0.0188	0.0200	-6.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.5796	0.3000	0.0207	0.0200	3.4	20.0
Bromobenzene	Ave	0.7889	0.7338		0.0186	0.0200	-7.0	20.0
1,2,3-Trichloropropane	Ave	0.1474	0.1714		0.0233	0.0200	16.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1394		0.0185	0.0200	-7.3	20.0
n-Propylbenzene	Ave	0.8625	0.7742		0.0180	0.0200	-10.2	20.0
2-Chlorotoluene	Ave	0.7917	0.6937		0.0175	0.0200	-12.4	20.0
1,3,5-Trimethylbenzene	Ave	2.724	2.408		0.0177	0.0200	-11.6	20.0
4-Chlorotoluene	Ave	0.8425	0.7308		0.0173	0.0200	-13.3	20.0
tert-Butylbenzene	Ave	2.203	1.881		0.0171	0.0200	-14.6	20.0
1,2,4-Trimethylbenzene	Ave	2.929	2.479		0.0169	0.0200	-15.4	20.0
sec-Butylbenzene	Ave	2.970	2.600		0.0175	0.0200	-12.5	20.0
1,3-Dichlorobenzene	Ave	1.606	1.381	0.6000	0.0172	0.0200	-14.1	20.0
p-Isopropyltoluene	Ave	2.633	2.268		0.0172	0.0200	-13.9	20.0
1,4-Dichlorobenzene	Ave	1.631	1.413	0.5000	0.0173	0.0200	-13.4	20.0
n-Butylbenzene	Ave	2.176	1.796		0.0165	0.0200	-17.5	20.0
1,2-Dichlorobenzene	Ave	1.453	1.319	0.4000	0.0182	0.0200	-9.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0815	0.0964	0.0500	0.0237	0.0200	18.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250386/2 Calibration Date: 10/07/2016 13:32

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM8480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Lin1		0.7190	0.2000	0.0188	0.0200	-5.8	50.0
Hexachlorobutadiene	Ave	0.2856	0.2620		0.0183	0.0200	-8.3	20.0
Naphthalene	Ave	1.680	1.735		0.0206	0.0200	3.2	50.0
1,2,3-Trichlorobenzene	Lin1		0.6394		0.0199	0.0200	-0.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2197		0.0192	0.0200	-4.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2340		0.0191	0.0200	-4.3	20.0
Toluene-d8 (Surr)	Ave	1.458	1.360		0.0187	0.0200	-6.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.5077		0.0189	0.0200	-5.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250386/2 Calibration Date: 10/07/2016 13:32

Instrument ID: A3UX16 Calib Start Date: 09/06/2016 18:05

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/06/2016 20:18

Lab File ID: UXM8480.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0011	0.0015		0.569	0.400	42.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCV 240-250386/5 Calibration Date: 10/07/2016 14:48

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 21:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 22:56

Lab File ID: UXM8483.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	Lin1		0.0205		0.208	0.200	4.1	20.0
2-Chloro-1,3-butadiene	Ave	0.4145	0.3989		0.0192	0.0200	-3.8	20.0
Diisopropyl ether	Ave	0.2590	0.2410		0.0186	0.0200	-6.9	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8517	0.7467		0.0175	0.0200	-12.3	20.0
Propionitrile	Ave	0.0207	0.0243		0.235	0.200	17.7	20.0
Ethyl acetate	Ave	0.1379	0.1313		0.0381	0.0400	-4.8	50.0
Methacrylonitrile	Ave	0.1004	0.1036		0.206	0.200	3.2	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7278	0.6741		0.0185	0.0200	-7.4	20.0
n-Butanol	Ave	0.0030	0.0031		0.517	0.500	3.4	20.0
Methyl methacrylate	Ave	0.1430	0.1268		0.0355	0.0400	-11.3	20.0
2-Nitropropane	Ave	0.0375	0.0299		0.0319	0.0400	-20.2*	20.0
1-Chlorohexane	Ave	0.4408	0.4226		0.0192	0.0200	-4.1	20.0
Cyclohexanone	Ave	0.0093	0.0059		0.126	0.200	-36.9*	20.0
1,2,3-Trimethylbenzene	Ave	2.928	2.632		0.0180	0.0200	-10.1	20.0
1,3,5-Trichlorobenzene	Ave	0.8627	0.8526		0.0198	0.0200	-1.2	20.0
2-Methylnaphthalene	Ave	0.8313	0.8439		0.0406	0.0400	1.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-244166/22 Calibration Date: 08/25/2016 02:13

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958024.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	0.4439	0.4320	0.1000	0.0195	0.0200	-2.7	20.0
Chloromethane	Ave	0.4304	0.4105	0.1000	0.0191	0.0200	-4.6	20.0
Vinyl chloride	Ave	0.4681	0.4317	0.1000	0.0184	0.0200	-7.8	20.0
Butadiene	Ave	0.4169	0.3886		0.0186	0.0200	-6.8	30.0
Bromomethane	Ave	0.3912	0.3774	0.0500	0.0193	0.0200	-3.5	20.0
Chloroethane	Ave	0.3650	0.3218	0.0500	0.0176	0.0200	-11.8	20.0
Dichlorofluoromethane	Ave	0.8531	0.7822		0.0183	0.0200	-8.3	20.0
Trichlorofluoromethane	Lin1		0.6880	0.1000	0.0178	0.0200	-10.8	20.0
Ethyl ether	Ave	0.3364	0.3174		0.0189	0.0200	-5.7	20.0
Acrolein	Ave	0.0644	0.0577		0.0897	0.100	-10.3	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.4353	0.4431	0.0500	0.0204	0.0200	1.8	20.0
1,1-Dichloroethene	Ave	0.7113	0.7153	0.1000	0.0201	0.0200	0.6	20.0
Acetone	Lin1		0.1098	0.0100	0.0411	0.0400	2.7	50.0
Iodomethane	Ave	0.7683	0.7999		0.0208	0.0200	4.1	20.0
Carbon disulfide	Ave	1.358	1.449	0.1000	0.0213	0.0200	6.6	20.0
3-Chloro-1-propene	Ave	0.4113	0.4711		0.0229	0.0200	14.5	20.0
Methyl acetate	Ave	0.2639	0.2570	0.1000	0.0974	0.100	-2.6	20.0
Methylene Chloride	Lin1		0.5345	0.1000	0.0203	0.0200	1.5	50.0
tert-Butyl alcohol	Ave	0.0398	0.0423		0.213	0.200	6.3	50.0
Acrylonitrile	Ave	0.1355	0.1392		0.206	0.200	2.8	20.0
Methyl tert-butyl ether	Ave	1.176	1.283	0.1000	0.0218	0.0200	9.1	20.0
trans-1,2-Dichloroethene	Ave	0.4746	0.4929	0.1000	0.0208	0.0200	3.8	20.0
Hexane	Ave	0.3484	0.3349		0.0192	0.0200	-3.9	20.0
1,1-Dichloroethane	Ave	0.6146	0.6014	0.2000	0.0196	0.0200	-2.1	20.0
Vinyl acetate	Ave	0.5568	0.5516		0.0198	0.0200	-0.9	50.0
2-Butanone	Ave	0.1372	0.1491	0.0100	0.0435	0.0400	8.6	20.0
cis-1,2-Dichloroethene	Ave	0.5179	0.5294	0.1000	0.0204	0.0200	2.2	20.0
2,2-Dichloropropane	Ave	0.2818	0.2810		0.0199	0.0200	-0.3	20.0
Bromochloromethane	Ave	0.2805	0.2777		0.0198	0.0200	-1.0	20.0
Tetrahydrofuran	Ave	0.0969	0.0954		0.0394	0.0400	-1.6	20.0
Chloroform	Ave	0.6592	0.6800	0.2000	0.0206	0.0200	3.2	20.0
1,1,1-Trichloroethane	Ave	0.4939	0.4997	0.1000	0.0202	0.0200	1.2	20.0
Cyclohexane	Ave	0.5226	0.5087	0.1000	0.0195	0.0200	-2.7	20.0
1,1-Dichloropropene	Ave	0.5099	0.4928		0.0193	0.0200	-3.4	20.0
Carbon tetrachloride	Ave	0.4378	0.4603	0.1000	0.0210	0.0200	5.1	20.0
Isobutyl alcohol	Lin1		0.0061		0.450	0.500	-10.0	20.0
1,2-Dichloroethane	Ave	0.5359	0.5513	0.1000	0.0206	0.0200	2.9	20.0
Benzene	Ave	1.514	1.555	0.5000	0.0206	0.0200	2.8	20.0
n-Heptane	Lin1		0.2084		0.0193	0.0200	-3.3	20.0
Trichloroethene	Ave	0.4471	0.4502	0.1500	0.0201	0.0200	0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-244166/22 Calibration Date: 08/25/2016 02:13

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958024.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-Dichloropropane	Ave	0.3197	0.3363	0.1000	0.0210	0.0200	5.2	20.0
Methylcyclohexane	Ave	0.5122	0.4850	0.1000	0.0189	0.0200	-5.3	20.0
1,4-Dioxane	Ave	0.0050	0.0043		0.342	0.400	-14.4	50.0
Dibromomethane	Ave	0.2890	0.2920		0.0202	0.0200	1.0	20.0
Bromodichloromethane	Ave	0.4492	0.4745	0.1500	0.0211	0.0200	5.6	20.0
2-Chloroethyl vinyl ether	Ave	0.2149	0.2359		0.0219	0.0200	9.7	20.0
cis-1,3-Dichloropropene	Ave	0.5206	0.5860	0.1500	0.0225	0.0200	12.6	20.0
4-Methyl-2-pentanone	Ave	0.2895	0.3162	0.0500	0.0437	0.0400	9.2	20.0
Toluene	Ave	2.129	2.115	0.4000	0.0199	0.0200	-0.7	20.0
trans-1,3-Dichloropropene	Ave	0.5994	0.6103	0.1000	0.0204	0.0200	1.8	20.0
Ethyl methacrylate	Ave	0.4990	0.5457		0.0219	0.0200	9.4	20.0
1,1,2-Trichloroethane	Ave	0.4336	0.4676	0.1000	0.0216	0.0200	7.8	20.0
1,3-Dichloropropane	Ave	0.7567	0.7679		0.0203	0.0200	1.5	20.0
Tetrachloroethene	Ave	0.5271	0.5350	0.1500	0.0203	0.0200	1.5	20.0
2-Hexanone	Lin1		0.2711	0.0500	0.0430	0.0400	7.6	20.0
Dibromochloromethane	Ave	0.3781	0.3931		0.0208	0.0200	4.0	20.0
1,2-Dibromoethane	Ave	0.4404	0.4759		0.0216	0.0200	8.1	20.0
Chlorobenzene	Ave	1.466	1.478	0.3000	0.0202	0.0200	0.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4450	0.4542		0.0204	0.0200	2.1	20.0
Ethylbenzene	Ave	0.7394	0.7727		0.0209	0.0200	4.5	20.0
m-Xylene & p-Xylene	Ave	0.9269	0.9549		0.0206	0.0200	3.0	20.0
o-Xylene	Ave	0.9489	1.012		0.0213	0.0200	6.6	20.0
Styrene	Ave	1.513	1.640	0.3000	0.0217	0.0200	8.4	20.0
Bromoform	Lin1		0.2154	0.1000	0.0208	0.0200	4.0	20.0
Isopropylbenzene	Ave	2.213	2.356	0.1000	0.0213	0.0200	6.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9483	0.9793	0.3000	0.0207	0.0200	3.3	20.0
Bromobenzene	Ave	1.101	1.053		0.0191	0.0200	-4.4	20.0
1,2,3-Trichloropropane	Ave	0.3792	0.3945		0.0208	0.0200	4.0	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.1808		0.0178	0.0200	-11.1	20.0
n-Propylbenzene	Ave	1.017	1.056		0.0208	0.0200	3.8	20.0
2-Chlorotoluene	Ave	0.9510	0.9193		0.0193	0.0200	-3.3	20.0
1,3,5-Trimethylbenzene	Ave	2.999	3.050		0.0203	0.0200	1.7	20.0
4-Chlorotoluene	Ave	1.035	0.9924		0.0192	0.0200	-4.1	20.0
tert-Butylbenzene	Ave	2.696	2.712		0.0201	0.0200	0.6	20.0
1,2,4-Trimethylbenzene	Ave	3.241	3.302		0.0204	0.0200	1.9	20.0
sec-Butylbenzene	Ave	0.8003	0.7585		0.0190	0.0200	-5.2	20.0
1,3-Dichlorobenzene	Ave	2.125	2.007	0.6000	0.0189	0.0200	-5.5	20.0
p-Isopropyltoluene	Ave	3.252	3.304		0.0203	0.0200	1.6	20.0
1,4-Dichlorobenzene	Ave	2.230	2.126	0.5000	0.0191	0.0200	-4.6	20.0
n-Butylbenzene	Ave	2.740	2.577		0.0188	0.0200	-6.0	20.0
1,2-Dichlorobenzene	Ave	2.020	2.047	0.4000	0.0203	0.0200	1.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-244166/22 Calibration Date: 08/25/2016 02:13

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958024.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	Lin1		0.1939	0.0500	0.0199	0.0200	-0.6	50.0
1,2,4-Trichlorobenzene	Ave	1.334	1.186	0.2000	0.0178	0.0200	-11.1	50.0
Hexachlorobutadiene	Lin1		0.4331		0.0197	0.0200	-1.7	20.0
Naphthalene	Ave	3.585	3.562		0.0199	0.0200	-0.6	50.0
1,2,3-Trichlorobenzene	Ave	1.307	1.101		0.0168	0.0200	-15.8	20.0
Dibromofluoromethane (Surr)	Ave	0.3703	0.3404		0.0119	0.0130	-8.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4581	0.3928		0.0111	0.0130	-14.2	20.0
Toluene-d8 (Surr)	Ave	1.842	1.719		0.0121	0.0130	-6.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.6810	0.6495		0.0124	0.0130	-4.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-244166/23 Calibration Date: 08/25/2016 02:37

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958025.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.3703	0.3309		0.0116	0.0130	-10.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4581	0.4154		0.0118	0.0130	-9.3	20.0
Toluene-d8 (Surr)	Ave	1.842	1.736		0.0122	0.0130	-5.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.6810	0.6128		0.0117	0.0130	-10.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICV 240-244166/23 Calibration Date: 08/25/2016 02:37

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 23:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/25/2016 01:25

Lab File ID: UX958025.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	0.0457	0.0412		0.180	0.200	-9.9	20.0
Diisopropyl ether	Ave	0.3536	0.3578		0.0202	0.0200	1.2	20.0
2-Chloro-1,3-butadiene	Ave	0.5181	0.5176		0.0200	0.0200	-0.0	20.0
Ethyl-t-butyl ether (ETBE)	Ave	1.045	1.111		0.0213	0.0200	6.4	20.0
Ethyl acetate	Ave	0.3115	0.3130		0.0402	0.0400	0.5	50.0
Propionitrile	Ave	0.0514	0.0511		0.199	0.200	-0.5	20.0
Methacrylonitrile	Ave	0.2074	0.2111		0.204	0.200	1.8	20.0
Tert-amyl-methyl ether (TAME)	Ave	1.138	1.197		0.0210	0.0200	5.2	20.0
n-Butanol	Ave	0.0049	0.0045		0.456	0.500	-8.9	20.0
Methyl methacrylate	Ave	0.2818	0.3013		0.0428	0.0400	6.9	20.0
2-Nitropropane	Ave	0.0384	0.0358		0.0373	0.0400	-6.8	20.0
1-Chlorohexane	Ave	0.5804	0.5688		0.0196	0.0200	-2.0	20.0
Cyclohexanone	Ave	0.0235	0.0247		0.210	0.200	4.8	20.0
1,2,3-Trimethylbenzene	Ave	3.493	3.885		0.0222	0.0200	11.2	20.0
1,3,5-Trichlorobenzene	Ave	1.413	1.479		0.0209	0.0200	4.7	20.0
2-Methylnaphthalene	Lin1		2.076		0.0335	0.0400	-16.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250510/2 Calibration Date: 10/09/2016 12:11

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958905.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	0.4439	0.4193	0.1000	0.0189	0.0200	-5.5	20.0
Chloromethane	Ave	0.4304	0.4366	0.1000	0.0203	0.0200	1.5	20.0
Vinyl chloride	Ave	0.4681	0.4293	0.1000	0.0183	0.0200	-8.3	20.0
Butadiene	Ave	0.4169	0.3276		0.0157	0.0200	-21.4*	20.0
Bromomethane	Ave	0.3912	0.3000	0.0500	0.0153	0.0200	-23.3*	20.0
Chloroethane	Ave	0.3650	0.3061	0.0500	0.0168	0.0200	-16.2	20.0
Dichlorofluoromethane	Ave	0.8531	0.7505		0.0176	0.0200	-12.0	20.0
Trichlorofluoromethane	Lin1		0.6130	0.1000	0.0159	0.0200	-20.5*	20.0
Ethyl ether	Ave	0.3364	0.3192		0.0190	0.0200	-5.1	20.0
Acrolein	Ave	0.0644	0.0469		0.0729	0.100	-27.1	50.0
1,1-Dichloroethene	Ave	0.7113	0.7005	0.1000	0.0197	0.0200	-1.5	20.0
Acetone	Lin1		0.1144	0.0100	0.0429	0.0400	7.2	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.4353	0.3881	0.0500	0.0178	0.0200	-10.9	20.0
Iodomethane	Ave	0.7683	0.6692		0.0174	0.0200	-12.9	20.0
Carbon disulfide	Ave	1.358	1.424	0.1000	0.0210	0.0200	4.8	20.0
3-Chloro-1-propene	Ave	0.4113	0.3587		0.0174	0.0200	-12.8	20.0
Methyl acetate	Ave	0.2639	0.2500	0.1000	0.0947	0.100	-5.3	20.0
Methylene Chloride	Lin1		0.5175	0.1000	0.0196	0.0200	-1.9	50.0
tert-Butyl alcohol	Ave	0.0398	0.0331		0.166	0.200	-16.8	50.0
Acrylonitrile	Ave	0.1355	0.1329		0.196	0.200	-1.9	20.0
Methyl tert-butyl ether	Ave	1.176	1.156	0.1000	0.0197	0.0200	-1.7	20.0
trans-1,2-Dichloroethene	Ave	0.4746	0.4670	0.1000	0.0197	0.0200	-1.6	20.0
Hexane	Ave	0.3484	0.3685		0.0212	0.0200	5.8	20.0
1,1-Dichloroethane	Ave	0.6146	0.5754	0.2000	0.0187	0.0200	-6.4	20.0
Vinyl acetate	Ave	0.5568	0.5523		0.0198	0.0200	-0.8	50.0
2-Butanone	Ave	0.1372	0.1441	0.0100	0.0420	0.0400	5.0	20.0
cis-1,2-Dichloroethene	Ave	0.5179	0.4670	0.1000	0.0180	0.0200	-9.8	20.0
2,2-Dichloropropane	Ave	0.2818	0.2670		0.0189	0.0200	-5.3	20.0
Bromochloromethane	Ave	0.2805	0.2642		0.0188	0.0200	-5.8	20.0
Tetrahydrofuran	Ave	0.0969	0.0972		0.0401	0.0400	0.3	20.0
Chloroform	Ave	0.6592	0.6162	0.2000	0.0187	0.0200	-6.5	20.0
1,1,1-Trichloroethane	Ave	0.4939	0.4377	0.1000	0.0177	0.0200	-11.4	20.0
Cyclohexane	Ave	0.5226	0.3404	0.1000	0.0130	0.0200	-34.9*	20.0
1,1-Dichloropropene	Ave	0.5099	0.4876		0.0191	0.0200	-4.4	20.0
Carbon tetrachloride	Ave	0.4378	0.4327	0.1000	0.0198	0.0200	-1.2	20.0
Isobutyl alcohol	Lin1		0.0098		0.720	0.500	44.0*	20.0
1,2-Dichloroethane	Ave	0.5359	0.4793	0.1000	0.0179	0.0200	-10.6	20.0
Benzene	Ave	1.514	1.480	0.5000	0.0196	0.0200	-2.2	20.0
n-Heptane	Lin1		0.2038		0.0189	0.0200	-5.6	20.0
Trichloroethene	Ave	0.4471	0.4220	0.1500	0.0189	0.0200	-5.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250510/2 Calibration Date: 10/09/2016 12:11

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958905.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	0.5122	0.4142	0.1000	0.0162	0.0200	-19.1	20.0
1,2-Dichloropropane	Ave	0.3197	0.3170	0.1000	0.0198	0.0200	-0.8	20.0
1,4-Dioxane	Ave	0.0050	0.0030		0.238	0.400	-40.5	50.0
Dibromomethane	Ave	0.2890	0.2701		0.0187	0.0200	-6.5	20.0
Bromodichloromethane	Ave	0.4492	0.4677	0.1500	0.0208	0.0200	4.1	20.0
2-Chloroethyl vinyl ether	Ave	0.2149	0.2282		0.0425	0.0400	6.2	20.0
cis-1,3-Dichloropropene	Ave	0.5206	0.5450	0.1500	0.0209	0.0200	4.7	20.0
4-Methyl-2-pentanone	Ave	0.2895	0.2977	0.0500	0.0411	0.0400	2.8	20.0
Toluene	Ave	2.129	1.976	0.4000	0.0186	0.0200	-7.2	20.0
trans-1,3-Dichloropropene	Ave	0.5994	0.6057	0.1000	0.0202	0.0200	1.1	20.0
Ethyl methacrylate	Ave	0.4990	0.5226		0.0209	0.0200	4.7	20.0
1,1,2-Trichloroethane	Ave	0.4336	0.4260	0.1000	0.0196	0.0200	-1.8	20.0
1,3-Dichloropropane	Ave	0.7567	0.7092		0.0187	0.0200	-6.3	20.0
Tetrachloroethene	Ave	0.5271	0.5076	0.1500	0.0193	0.0200	-3.7	20.0
2-Hexanone	Lin1		0.2559	0.0500	0.0407	0.0400	1.6	20.0
Dibromochloromethane	Ave	0.3781	0.4092		0.0216	0.0200	8.2	20.0
1,2-Dibromoethane	Ave	0.4404	0.4198		0.0191	0.0200	-4.7	20.0
Chlorobenzene	Ave	1.466	1.347	0.3000	0.0184	0.0200	-8.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4450	0.4316		0.0194	0.0200	-3.0	20.0
Ethylbenzene	Ave	0.7394	0.7283		0.0197	0.0200	-1.5	20.0
m-Xylene & p-Xylene	Ave	0.9269	0.8872		0.0191	0.0200	-4.3	20.0
o-Xylene	Ave	0.9489	0.8965		0.0189	0.0200	-5.5	20.0
Styrene	Ave	1.513	1.535	0.3000	0.0203	0.0200	1.4	20.0
Bromoform	Lin1		0.2468	0.1000	0.0238	0.0200	18.8	20.0
Isopropylbenzene	Ave	2.213	2.170	0.1000	0.0196	0.0200	-1.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9483	0.9128	0.3000	0.0193	0.0200	-3.7	20.0
Bromobenzene	Ave	1.101	1.006		0.0183	0.0200	-8.6	20.0
1,2,3-Trichloropropane	Ave	0.3792	0.3576		0.0189	0.0200	-5.7	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2547		0.0247	0.0200	23.6*	20.0
n-Propylbenzene	Ave	1.017	0.9738		0.0191	0.0200	-4.3	20.0
2-Chlorotoluene	Ave	0.9510	0.9058		0.0190	0.0200	-4.8	20.0
1,3,5-Trimethylbenzene	Ave	2.999	2.950		0.0197	0.0200	-1.6	20.0
4-Chlorotoluene	Ave	1.035	0.9813		0.0190	0.0200	-5.2	20.0
tert-Butylbenzene	Ave	2.696	2.498		0.0185	0.0200	-7.4	20.0
1,2,4-Trimethylbenzene	Ave	3.241	3.164		0.0195	0.0200	-2.3	20.0
sec-Butylbenzene	Ave	0.8003	0.7642		0.0191	0.0200	-4.5	20.0
1,3-Dichlorobenzene	Ave	2.125	1.946	0.6000	0.0183	0.0200	-8.4	20.0
p-Isopropyltoluene	Ave	3.252	3.138		0.0193	0.0200	-3.5	20.0
1,4-Dichlorobenzene	Ave	2.230	1.994	0.5000	0.0179	0.0200	-10.6	20.0
n-Butylbenzene	Ave	2.740	2.446		0.0178	0.0200	-10.8	20.0
1,2-Dichlorobenzene	Ave	2.020	1.923	0.4000	0.0190	0.0200	-4.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCVIS 240-250510/2 Calibration Date: 10/09/2016 12:11

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 20:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/24/2016 22:37

Lab File ID: UX958905.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	Lin1		0.2107	0.0500	0.0215	0.0200	7.7	50.0
1,2,4-Trichlorobenzene	Ave	1.334	1.195	0.2000	0.0179	0.0200	-10.5	50.0
Hexachlorobutadiene	Lin1		0.4380		0.0199	0.0200	-0.6	20.0
Naphthalene	Ave	3.585	3.447		0.0192	0.0200	-3.8	50.0
1,2,3-Trichlorobenzene	Ave	1.307	1.164		0.0178	0.0200	-10.9	20.0
Dibromofluoromethane (Surr)	Ave	0.3703	0.3181		0.0112	0.0130	-14.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4581	0.3813		0.0108	0.0130	-16.8	20.0
Toluene-d8 (Surr)	Ave	1.842	1.612		0.0114	0.0130	-12.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.6810	0.6456		0.0123	0.0130	-5.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: CCV 240-250510/4 Calibration Date: 10/09/2016 13:01

Instrument ID: A3UX9 Calib Start Date: 08/24/2016 23:25

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/25/2016 01:25

Lab File ID: UX958907.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	0.0457	0.0465		0.203	0.200	1.7	20.0
Diisopropyl ether	Ave	0.3536	0.3256		0.0184	0.0200	-7.9	20.0
2-Chloro-1,3-butadiene	Ave	0.5181	0.4653		0.0180	0.0200	-10.2	20.0
Ethyl-t-butyl ether (ETBE)	Ave	1.045	1.025		0.0196	0.0200	-1.8	20.0
Ethyl acetate	Ave	0.3115	0.2867		0.0368	0.0400	-8.0	50.0
Propionitrile	Ave	0.0514	0.0496		0.193	0.200	-3.4	20.0
Methacrylonitrile	Ave	0.2074	0.2066		0.199	0.200	-0.4	20.0
Tert-amyl-methyl ether (TAME)	Ave	1.138	1.076		0.0189	0.0200	-5.4	20.0
n-Butanol	Ave	0.0049	0.0079		0.794	0.500	58.8*	20.0
Methyl methacrylate	Ave	0.2818	0.2862		0.0406	0.0400	1.6	20.0
2-Nitropropane	Ave	0.0384	0.0470		0.0489	0.0400	22.3*	20.0
1-Chlorohexane	Ave	0.5804	0.5191		0.0179	0.0200	-10.6	20.0
Cyclohexanone	Ave	0.0235	0.0252		0.214	0.200	7.1	20.0
1,2,3-Trimethylbenzene	Ave	3.493	3.310		0.0189	0.0200	-5.3	20.0
1,3,5-Trichlorobenzene	Ave	1.413	1.312		0.0186	0.0200	-7.2	20.0
2-Methylnaphthalene	Lin1		2.039		0.0329	0.0400	-17.7	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: UXM8435.D Lab Sample ID: MB 240-250232/7

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

Instrument ID: A3UX16 Date Analyzed: 10/06/2016 17:45

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 240-250232/4	UXM8432.D	10/06/2016 16:35
MSA-SW37A-092616	240-70005-1	UXM8436.D	10/06/2016 18:08
MSA-SW37B-092616	240-70005-2	UXM8437.D	10/06/2016 18:31
MSA-SW37C-092616	240-70005-3	UXM8438.D	10/06/2016 18:54
MSA-SW37D-092616	240-70005-4	UXM8439.D	10/06/2016 19:17
MSA-SW38A-092616	240-70005-5	UXM8440.D	10/06/2016 19:40
MSA-SW38B-092616	240-70005-6	UXM8441.D	10/06/2016 20:04
MSA-SW38C-092616	240-70005-7	UXM8442.D	10/06/2016 20:27
MSA-SW38D-092616	240-70005-8	UXM8443.D	10/06/2016 20:50
MSA-SW39A-092616	240-70005-9	UXM8444.D	10/06/2016 21:13
MSA-SW39B-092616	240-70005-10	UXM8445.D	10/06/2016 21:37
MSA-SW39C-092616	240-70005-11	UXM8446.D	10/06/2016 22:00
MSA-SW39D-092616	240-70005-12	UXM8447.D	10/06/2016 22:23
MSA-SW40A-092616	240-70005-13	UXM8448.D	10/06/2016 22:47
MSA-SW40B-092616	240-70005-14	UXM8449.D	10/06/2016 23:10
MSA-SW40C-092616	240-70005-15	UXM8450.D	10/06/2016 23:33
MSA-SW40D-092616	240-70005-16	UXM8451.D	10/06/2016 23:56
MSA-SW41A-092616	240-70005-17	UXM8452.D	10/07/2016 00:20
MSA-SW41B-092616	240-70005-18	UXM8453.D	10/07/2016 00:43
MSA-SW41C-092616	240-70005-19	UXM8454.D	10/07/2016 01:06
MSA-SW41D-092616	240-70005-20	UXM8455.D	10/07/2016 01:29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250232/7

Matrix: Water | Lab File ID: UXM8435.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/06/2016 17:45

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250232 | 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.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250232/7

Matrix: Water | Lab File ID: UXM8435.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/06/2016 17:45

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250232 | 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	0.428	J	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.: 240-70005-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-250232/7

Matrix: Water Lab File ID: UXM8435.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/06/2016 17:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250232 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)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-132

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-250232/7

Matrix: Water Lab File ID: UXM8435.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/06/2016 17:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 250232 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
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250232/7

Matrix: Water | Lab File ID: UXM8435.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/06/2016 17:45

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250232 | Units: ug/L

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

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: UXM8484.D Lab Sample ID: MB 240-250386/6

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

Instrument ID: A3UX16 Date Analyzed: 10/07/2016 15:11

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-250386/3	UXM8481.D	10/07/2016 14:01
MSA-SW42A-092616	240-70005-21	UXM8485.D	10/07/2016 15:34
MSA-SW42B-092616	240-70005-22	UXM8486.D	10/07/2016 15:58
MSA-SW42C-092616	240-70005-23	UXM8487.D	10/07/2016 16:22
MSA-SW42D-092616	240-70005-24	UXM8488.D	10/07/2016 16:45
MSA-SW43A-092616	240-70005-25	UXM8489.D	10/07/2016 17:08
MSA-SW43B-092616	240-70005-26	UXM8490.D	10/07/2016 17:31
MSA-SW43C-092616	240-70005-27	UXM8491.D	10/07/2016 17:55
MSA-SW43D-092616	240-70005-28	UXM8492.D	10/07/2016 18:18
MSA-SW44A-092616	240-70005-29	UXM8493.D	10/07/2016 18:41
MSA-SW44B-092616	240-70005-30	UXM8494.D	10/07/2016 19:04
MSA-SW44C-092616	240-70005-31	UXM8495.D	10/07/2016 19:27
MSA-SW44D-092616	240-70005-32	UXM8496.D	10/07/2016 19:51
MSA-SW45A-092616	240-70005-33	UXM8497.D	10/07/2016 20:14
MSA-SW45B-092616	240-70005-34	UXM8498.D	10/07/2016 20:37
MSA-SW45C-092616	240-70005-35	UXM8499.D	10/07/2016 21:01
MSA-SW45D-092616	240-70005-36	UXM8500.D	10/07/2016 21:24
MSA-SW46A-092616	240-70005-37	UXM8501.D	10/07/2016 21:47
MSA-SW47A-092616	240-70005-38	UXM8502.D	10/07/2016 22:10
MSA-SW48A-092616	240-70005-39	UXM8503.D	10/07/2016 22:33
MSA-SW49A-092616	240-70005-40	UXM8504.D	10/07/2016 22:56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250386/6

Matrix: Water | Lab File ID: UXM8484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/07/2016 15:11

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250386 | 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.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250386/6

Matrix: Water | Lab File ID: UXM8484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/07/2016 15:11

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250386 | 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.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250386/6

Matrix: Water | Lab File ID: UXM8484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/07/2016 15:11

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250386 | 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)	90		73-124
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-132

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

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250386/6

Matrix: Water | Lab File ID: UXM8484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/07/2016 15:11

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250386 | Units: ug/L

Number TICs Found: 2 | TIC Result Total: 2.278

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
108-70-3	1,3,5-Trichlorobenzene	11.47	0.448	J	95%
91-57-6	2-Methylnaphthalene	13.53	1.83	J	89%

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

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250386/6

Matrix: Water | Lab File ID: UXM8484.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/07/2016 15:11

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 250386 | Units: ug/L

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

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab File ID: UX958909.D Lab Sample ID: MB 240-250510/6

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

Instrument ID: A3UX9 Date Analyzed: 10/09/2016 13:50

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 240-250510/3	UX958906.D	10/09/2016 12:35
EL-SW01A-092616	240-70005-41	UX958911.D	10/09/2016 14:41
EL-SW01B-092616	240-70005-42	UX958912.D	10/09/2016 15:05
EL-SW01C-092616	240-70005-43	UX958913.D	10/09/2016 15:30
EL-SW01D-092616	240-70005-44	UX958914.D	10/09/2016 15:54
TB-092616	240-70005-45	UX958915.D	10/09/2016 16:18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250510/6

Matrix: Water | Lab File ID: UX958909.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2016 13:50

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.: 250510 | 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.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250510/6

Matrix: Water | Lab File ID: UX958909.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2016 13:50

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.: 250510 | 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.: 240-70005-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-250510/6

Matrix: Water | Lab File ID: UX958909.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2016 13:50

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.: 250510 | 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)	87		73-124
1868-53-7	Dibromofluoromethane (Surr)	81		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-132

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-250510/6

Matrix: Water Lab File ID: UX958909.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 10/09/2016 13:50

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.: 250510 Units: ug/L

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-70005-1

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-092616	240-70005-1	100	97	89	94
MSA-SW37B-092616	240-70005-2	103	98	88	95
MSA-SW37C-092616	240-70005-3	98	99	91	92
MSA-SW37D-092616	240-70005-4	93	96	88	88
MSA-SW38A-092616	240-70005-5	95	97	87	88
MSA-SW38B-092616	240-70005-6	93	97	89	88
MSA-SW38C-092616	240-70005-7	94	98	87	87
MSA-SW38D-092616	240-70005-8	94	97	87	89
MSA-SW39A-092616	240-70005-9	96	98	88	88
MSA-SW39B-092616	240-70005-10	93	96	87	88
MSA-SW39C-092616	240-70005-11	96	98	91	89
MSA-SW39D-092616	240-70005-12	94	98	88	87
MSA-SW40A-092616	240-70005-13	96	98	87	89
MSA-SW40B-092616	240-70005-14	94	98	88	86
MSA-SW40C-092616	240-70005-15	94	96	88	87
MSA-SW40D-092616	240-70005-16	96	98	89	86
MSA-SW41A-092616	240-70005-17	97	98	91	89
MSA-SW41B-092616	240-70005-18	96	97	89	87
MSA-SW41C-092616	240-70005-19	94	97	89	87
MSA-SW41D-092616	240-70005-20	93	97	90	86
MSA-SW42A-092616	240-70005-21	94	94	88	87
MSA-SW42B-092616	240-70005-22	97	99	89	90
MSA-SW42C-092616	240-70005-23	96	98	90	89
MSA-SW42D-092616	240-70005-24	94	96	87	86
MSA-SW43A-092616	240-70005-25	96	96	88	87
MSA-SW43B-092616	240-70005-26	96	96	87	87
MSA-SW43C-092616	240-70005-27	95	95	90	88
MSA-SW43D-092616	240-70005-28	97	98	89	89
MSA-SW44A-092616	240-70005-29	98	98	88	89
MSA-SW44B-092616	240-70005-30	97	97	89	87
MSA-SW44C-092616	240-70005-31	98	96	90	89
MSA-SW44D-092616	240-70005-32	98	99	88	88
MSA-SW45A-092616	240-70005-33	97	96	88	87
MSA-SW45B-092616	240-70005-34	96	95	86	85
MSA-SW45C-092616	240-70005-35	98	95	88	87

	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.: 240-70005-1

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-SW45D-092616	240-70005-36	96	95	86	85
MSA-SW46A-092616	240-70005-37	96	96	88	87
MSA-SW47A-092616	240-70005-38	98	95	88	87
MSA-SW48A-092616	240-70005-39	97	95	88	89
MSA-SW49A-092616	240-70005-40	96	96	88	88
EL-SW01A-092616	240-70005-41	84	82	87	87
EL-SW01B-092616	240-70005-42	88	86	85	83
EL-SW01C-092616	240-70005-43	92	89	92	92
EL-SW01D-092616	240-70005-44	85	85	87	86
TB-092616	240-70005-45	89	85	86	87
	MB 240-250232/7	96	97	89	88
	MB 240-250386/6	96	98	90	90
	MB 240-250510/6	81	83	87	88
	LCS 240-250232/4	94	95	90	92
	LCS 240-250386/3	97	96	92	95
	LCS 240-250510/3	89	86	95	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	63-132
TOL = Toluene-d8 (Surr)	73-124
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM8432.D

Lab ID: LCS 240-250232/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	19.8	99	77-126	
1,1,1-Trichloroethane	20.0	20.2	101	79-133	
1,1,2,2-Tetrachloroethane	20.0	22.7	114	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	27.6	138	65-151	
1,1-Dichloroethane	20.0	19.1	96	77-121	
1,1-Dichloroethene	20.0	21.5	107	70-141	
1,1-Dichloropropene	20.0	22.0	110	80-120	
1,2,3-Trichlorobenzene	20.0	22.4	112	53-135	
1,2,3-Trichloropropane	20.0	27.6	138	65-135	*
1,2,4-Trichlorobenzene	20.0	20.8	104	53-137	
1,2,4-Trimethylbenzene	20.0	17.9	89	77-120	
1,2-Dibromo-3-Chloropropane	20.0	29.3	147	46-140	*
1,2-Dichlorobenzene	20.0	19.2	96	80-120	
1,2-Dichloroethane	20.0	20.1	101	76-130	
1,2-Dichloropropane	20.0	19.6	98	79-121	
1,3-Dichlorobenzene	20.0	18.5	92	80-120	
1,3-Dichloropropane	20.0	21.0	105	77-120	
1,4-Dichlorobenzene	20.0	18.6	93	80-120	
2,2-Dichloropropane	20.0	17.2	86	70-137	
2-Chloroethyl vinyl ether	20.0	22.1	111	51-138	
2-Chlorotoluene	20.0	18.7	93	76-120	
2-Hexanone	40.0	44.0	110	56-124	
4-Chlorotoluene	20.0	18.7	93	77-120	
p-Isopropyltoluene	20.0	18.5	93	75-120	
Acetone	40.0	40.8	102	46-120	
Bromobenzene	20.0	19.9	100	79-120	
Benzene	20.0	19.8	99	80-120	
Bromoform	20.0	27.1	136	52-157	
Bromomethane	20.0	16.9	84	24-160	
Carbon disulfide	20.0	19.3	96	58-160	
Carbon tetrachloride	20.0	22.5	112	69-149	
Chlorobenzene	20.0	19.1	95	80-120	
Chloroethane	20.0	18.0	90	24-147	
Chloroform	20.0	19.5	97	80-120	
Chloromethane	20.0	16.8	84	50-135	
cis-1,2-Dichloroethene	20.0	20.3	101	80-120	
cis-1,3-Dichloropropene	20.0	19.3	97	75-120	
Bromochloromethane	20.0	22.0	110	77-125	
Dibromomethane	20.0	22.2	111	73-127	
Bromodichloromethane	20.0	19.1	95	76-125	
Dichlorodifluoromethane	20.0	21.0	105	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.: 240-70005-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM8432.D

Lab ID: LCS 240-250232/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	20.0	20.1	100	80-120	
Hexachlorobutadiene	20.0	22.3	111	55-134	
Isopropylbenzene	20.0	20.1	100	80-120	
m-Xylene & p-Xylene	20.0	20.1	100	80-120	
2-Butanone	40.0	46.3	116	54-122	
Naphthalene	20.0	23.7	118	39-148	
4-Methyl-2-pentanone	40.0	45.0	112	60-131	
n-Butylbenzene	20.0	17.6	88	66-120	
n-Propylbenzene	20.0	19.9	99	75-121	
Methyl tert-butyl ether	20.0	21.0	105	75-126	
sec-Butylbenzene	20.0	19.0	95	72-120	
Methylene Chloride	20.0	18.6	93	68-136	
o-Xylene	20.0	19.2	96	80-120	
Styrene	20.0	20.1	100	80-120	
Tetrachloroethene	20.0	22.9	114	80-123	
Toluene	20.0	19.1	96	80-121	
trans-1,2-Dichloroethene	20.0	20.8	104	80-123	
trans-1,3-Dichloropropene	20.0	19.4	97	65-120	
Trichloroethene	20.0	21.6	108	80-122	
Trichlorofluoromethane	20.0	20.9	105	56-161	
tert-Butylbenzene	20.0	19.0	95	78-120	
1,2-Dibromoethane	20.0	23.7	118	80-126	
Vinyl acetate	20.0	19.2	96	57-144	
Vinyl chloride	20.0	18.1	90	60-129	
tert-Butyl alcohol	200	255	127	47-137	
Xylenes, Total	40.0	39.3	98	80-120	
Dibromochloromethane	20.0	22.5	112	68-131	

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.: 240-70005-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM8481.D

Lab ID: LCS 240-250386/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.4	102	77-126	
1,1,1-Trichloroethane	20.0	20.4	102	79-133	
1,1,2,2-Tetrachloroethane	20.0	23.1	115	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	26.9	134	65-151	
1,1-Dichloroethane	20.0	19.6	98	77-121	
1,1-Dichloroethene	20.0	21.4	107	70-141	
1,1-Dichloropropene	20.0	22.3	111	80-120	
1,2,3-Trichlorobenzene	20.0	22.5	112	53-135	
1,2,3-Trichloropropane	20.0	27.0	135	65-135	
1,2,4-Trichlorobenzene	20.0	21.4	107	53-137	
1,2,4-Trimethylbenzene	20.0	18.7	93	77-120	
1,2-Dibromo-3-Chloropropane	20.0	27.4	137	46-140	
1,2-Dichlorobenzene	20.0	20.0	100	80-120	
1,2-Dichloroethane	20.0	20.4	102	76-130	
1,2-Dichloropropane	20.0	20.0	100	79-121	
1,3-Dichlorobenzene	20.0	19.1	95	80-120	
1,3-Dichloropropane	20.0	21.4	107	77-120	
1,4-Dichlorobenzene	20.0	19.6	98	80-120	
2,2-Dichloropropane	20.0	17.0	85	70-137	
2-Chloroethyl vinyl ether	20.0	21.9	109	51-138	
2-Chlorotoluene	20.0	19.3	97	76-120	
2-Hexanone	40.0	45.7	114	56-124	
4-Chlorotoluene	20.0	19.2	96	77-120	
p-Isopropyltoluene	20.0	19.6	98	75-120	
Acetone	40.0	43.8	110	46-120	
Bromobenzene	20.0	20.5	102	79-120	
Benzene	20.0	20.2	101	80-120	
Bromoform	20.0	26.1	131	52-157	
Bromomethane	20.0	16.0	80	24-160	
Carbon disulfide	20.0	18.9	94	58-160	
Carbon tetrachloride	20.0	23.0	115	69-149	
Chlorobenzene	20.0	19.5	97	80-120	
Chloroethane	20.0	17.7	88	24-147	
Chloroform	20.0	19.5	98	80-120	
Chloromethane	20.0	17.1	86	50-135	
cis-1,2-Dichloroethene	20.0	20.4	102	80-120	
cis-1,3-Dichloropropene	20.0	19.6	98	75-120	
Bromochloromethane	20.0	22.2	111	77-125	
Dibromomethane	20.0	22.2	111	73-127	
Bromodichloromethane	20.0	19.3	96	76-125	
Dichlorodifluoromethane	20.0	20.3	102	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.: 240-70005-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM8481.D

Lab ID: LCS 240-250386/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	20.0	20.3	102	80-120	
Hexachlorobutadiene	20.0	22.7	114	55-134	
Isopropylbenzene	20.0	20.6	103	80-120	
m-Xylene & p-Xylene	20.0	20.3	101	80-120	
2-Butanone	40.0	46.7	117	54-122	
Naphthalene	20.0	23.9	119	39-148	
4-Methyl-2-pentanone	40.0	45.0	112	60-131	
n-Butylbenzene	20.0	18.7	94	66-120	
n-Propylbenzene	20.0	20.5	102	75-121	
Methyl tert-butyl ether	20.0	20.7	104	75-126	
sec-Butylbenzene	20.0	19.8	99	72-120	
Methylene Chloride	20.0	18.8	94	68-136	
o-Xylene	20.0	19.4	97	80-120	
Styrene	20.0	20.2	101	80-120	
Tetrachloroethene	20.0	23.1	115	80-123	
Toluene	20.0	20.0	100	80-121	
trans-1,2-Dichloroethene	20.0	21.4	107	80-123	
trans-1,3-Dichloropropene	20.0	20.0	100	65-120	
Trichloroethene	20.0	21.7	109	80-122	
Trichlorofluoromethane	20.0	20.0	100	56-161	
tert-Butylbenzene	20.0	19.3	97	78-120	
1,2-Dibromoethane	20.0	23.8	119	80-126	
Vinyl acetate	20.0	19.8	99	57-144	
Vinyl chloride	20.0	17.8	89	60-129	
tert-Butyl alcohol	200	239	120	47-137	
Xylenes, Total	40.0	39.7	99	80-120	
Dibromochloromethane	20.0	22.0	110	68-131	

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.: 240-70005-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX958906.D

Lab ID: LCS 240-250510/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	19.9	100	77-126	
1,1,1-Trichloroethane	20.0	18.8	94	79-133	
1,1,2,2-Tetrachloroethane	20.0	19.3	96	61-130	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	17.7	89	65-151	
1,1-Dichloroethane	20.0	18.4	92	77-121	
1,1-Dichloroethene	20.0	19.2	96	70-141	
1,1-Dichloropropene	20.0	19.2	96	80-120	
1,2,3-Trichlorobenzene	20.0	18.1	90	53-135	
1,2,3-Trichloropropane	20.0	19.8	99	65-135	
1,2,4-Trichlorobenzene	20.0	18.8	94	53-137	
1,2,4-Trimethylbenzene	20.0	19.5	98	77-120	
1,2-Dibromo-3-Chloropropane	20.0	22.5	112	46-140	
1,2-Dichlorobenzene	20.0	19.3	97	80-120	
1,2-Dichloroethane	20.0	18.3	92	76-130	
1,2-Dichloropropane	20.0	20.5	103	79-121	
1,3-Dichlorobenzene	20.0	18.8	94	80-120	
1,3-Dichloropropane	20.0	18.5	92	77-120	
1,4-Dichlorobenzene	20.0	18.7	94	80-120	
2,2-Dichloropropane	20.0	19.8	99	70-137	
2-Chloroethyl vinyl ether	20.0	21.6	108	51-138	
2-Chlorotoluene	20.0	19.3	96	76-120	
2-Hexanone	40.0	38.8	97	56-124	
4-Chlorotoluene	20.0	19.6	98	77-120	
p-Isopropyltoluene	20.0	19.8	99	75-120	
Acetone	40.0	39.3	98	46-120	
Bromobenzene	20.0	18.8	94	79-120	
Benzene	20.0	20.0	100	80-120	
Bromoform	20.0	25.9	129	52-157	
Bromomethane	20.0	17.0	85	24-160	
Carbon disulfide	20.0	21.9	110	58-160	
Carbon tetrachloride	20.0	19.7	99	69-149	
Chlorobenzene	20.0	18.5	92	80-120	
Chloroethane	20.0	18.5	92	24-147	
Chloroform	20.0	19.0	95	80-120	
Chloromethane	20.0	20.9	105	50-135	
cis-1,2-Dichloroethene	20.0	18.9	95	80-120	
cis-1,3-Dichloropropene	20.0	21.7	109	75-120	
Bromochloromethane	20.0	18.5	93	77-125	
Dibromomethane	20.0	20.0	100	73-127	
Bromodichloromethane	20.0	20.2	101	76-125	
Dichlorodifluoromethane	20.0	20.4	102	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.: 240-70005-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX958906.D

Lab ID: LCS 240-250510/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethylbenzene	20.0	19.3	97	80-120	
Hexachlorobutadiene	20.0	20.5	102	55-134	
Isopropylbenzene	20.0	20.0	100	80-120	
m-Xylene & p-Xylene	20.0	19.7	98	80-120	
2-Butanone	40.0	43.2	108	54-122	
Naphthalene	20.0	20.5	103	39-148	
4-Methyl-2-pentanone	40.0	41.5	104	60-131	
n-Butylbenzene	20.0	18.3	91	66-120	
n-Propylbenzene	20.0	20.5	102	75-121	
Methyl tert-butyl ether	20.0	20.4	102	75-126	
sec-Butylbenzene	20.0	18.8	94	72-120	
Methylene Chloride	20.0	18.7	94	68-136	
o-Xylene	20.0	18.8	94	80-120	
Styrene	20.0	20.4	102	80-120	
Tetrachloroethene	20.0	19.4	97	80-123	
Toluene	20.0	18.7	93	80-121	
trans-1,2-Dichloroethene	20.0	20.1	101	80-123	
trans-1,3-Dichloropropene	20.0	20.2	101	65-120	
Trichloroethene	20.0	19.6	98	80-122	
Trichlorofluoromethane	20.0	17.7	88	56-161	
tert-Butylbenzene	20.0	20.2	101	78-120	
1,2-Dibromoethane	20.0	20.0	100	80-126	
Vinyl acetate	20.0	20.8	104	57-144	
Vinyl chloride	20.0	20.5	102	60-129	
tert-Butyl alcohol	200	198	99	47-137	
Xylenes, Total	40.0	38.5	96	80-120	
Dibromochloromethane	20.0	20.8	104	68-131	

Column to be used to flag recovery and RPD values

FORM III 8260C

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Sample No.: CCVIS 240-250232/3 Date Analyzed: 10/06/2016 16:12

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM8431.D Heated Purge: (Y/N) N

Calibration ID: 35918

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		896824	5.17	641969	7.87	362101	10.10
UPPER LIMIT		1793648	5.67	1283938	8.37	724202	10.60
LOWER LIMIT		448412	4.67	320985	7.37	181051	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-250232/4		901392	5.17	647045	7.85	362020	10.10
CCV 240-250232/5		895914	5.17	632536	7.87	342253	10.10
MB 240-250232/7		871711	5.17	626050	7.85	330500	10.10
240-70005-1	MSA-SW37A-092616	775993	5.17	581937	7.85	327219	10.10
240-70005-2	MSA-SW37B-092616	750706	5.17	542496	7.87	318623	10.10
240-70005-3	MSA-SW37C-092616	821743	5.17	594172	7.87	320118	10.10
240-70005-4	MSA-SW37D-092616	887062	5.17	635410	7.85	333746	10.10
240-70005-5	MSA-SW38A-092616	860868	5.17	610696	7.87	334091	10.10
240-70005-6	MSA-SW38B-092616	877841	5.17	625714	7.85	330585	10.10
240-70005-7	MSA-SW38C-092616	884686	5.17	631639	7.85	334944	10.10
240-70005-8	MSA-SW38D-092616	845894	5.17	606869	7.85	334893	10.10
240-70005-9	MSA-SW39A-092616	858624	5.17	619305	7.87	326451	10.10
240-70005-10	MSA-SW39B-092616	887760	5.17	633504	7.87	333542	10.10
240-70005-11	MSA-SW39C-092616	868937	5.17	615068	7.85	325902	10.10
240-70005-12	MSA-SW39D-092616	879875	5.17	630965	7.85	334445	10.10
240-70005-13	MSA-SW40A-092616	852273	5.17	614425	7.85	322480	10.10
240-70005-14	MSA-SW40B-092616	879234	5.17	628738	7.85	330191	10.10
240-70005-15	MSA-SW40C-092616	875406	5.17	627916	7.87	330426	10.10
240-70005-16	MSA-SW40D-092616	860578	5.17	616686	7.85	326315	10.10
240-70005-17	MSA-SW41A-092616	855958	5.17	613051	7.87	322069	10.10
240-70005-18	MSA-SW41B-092616	854818	5.17	607798	7.87	324162	10.10
240-70005-19	MSA-SW41C-092616	888501	5.17	627754	7.85	332114	10.10
240-70005-20	MSA-SW41D-092616	861802	5.17	611535	7.85	322224	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.: 240-70005-1

SDG No.:

Sample No.: CCVIS 240-250386/2 Date Analyzed: 10/07/2016 13:32

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM8480.D Heated Purge: (Y/N) N

Calibration ID: 35918

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		899238	5.17	633502	7.87	355550	10.10
UPPER LIMIT		1798476	5.67	1267004	8.37	711100	10.60
LOWER LIMIT		449619	4.67	316751	7.37	177775	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-250386/3		903803	5.17	637466	7.87	347962	10.10
CCV 240-250386/5		885344	5.17	626100	7.87	331795	10.10
MB 240-250386/6		848894	5.17	601519	7.87	327139	10.10
240-70005-21	MSA-SW42A-092616	882657	5.17	636102	7.87	338125	10.10
240-70005-22	MSA-SW42B-092616	797156	5.17	588783	7.87	329275	10.10
240-70005-23	MSA-SW42C-092616	851893	5.17	609544	7.87	327666	10.10
240-70005-24	MSA-SW42D-092616	861464	5.17	616348	7.85	326917	10.10
240-70005-25	MSA-SW43A-092616	843830	5.17	605374	7.87	328371	10.10
240-70005-26	MSA-SW43B-092616	850087	5.17	606780	7.87	326938	10.10
240-70005-27	MSA-SW43C-092616	868664	5.17	616594	7.87	328497	10.10
240-70005-28	MSA-SW43D-092616	828371	5.17	599019	7.87	326117	10.10
240-70005-29	MSA-SW44A-092616	820172	5.17	590364	7.87	318943	10.10
240-70005-30	MSA-SW44B-092616	831130	5.17	596632	7.85	321121	10.10
240-70005-31	MSA-SW44C-092616	816243	5.17	581335	7.87	319649	10.10
240-70005-32	MSA-SW44D-092616	829338	5.17	599436	7.87	321042	10.10
240-70005-33	MSA-SW45A-092616	845822	5.17	607825	7.85	323327	10.10
240-70005-34	MSA-SW45B-092616	842780	5.17	604934	7.87	322752	10.10
240-70005-35	MSA-SW45C-092616	810745	5.17	587078	7.87	322370	10.10
240-70005-36	MSA-SW45D-092616	835703	5.17	605123	7.87	325019	10.10
240-70005-37	MSA-SW46A-092616	830943	5.17	604937	7.85	321070	10.10
240-70005-38	MSA-SW47A-092616	819800	5.17	588494	7.87	326857	10.10
240-70005-39	MSA-SW48A-092616	820574	5.17	581552	7.87	321107	10.10
240-70005-40	MSA-SW49A-092616	825358	5.17	591254	7.85	322574	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.: 240-70005-1

SDG No.:

Sample No.: ICIS 240-244166/11 Date Analyzed: 08/24/2016 21:49

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX958013.D Heated Purge: (Y/N) N

Calibration ID: 35810

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		811801	5.40	713981	8.08	440203	10.31
UPPER LIMIT		1623602	5.90	1427962	8.58	880406	10.81
LOWER LIMIT		405901	4.90	356991	7.58	220102	9.81
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-244166/22		835845	5.40	706662	8.08	460284	10.31
ICV 240-244166/23		816308	5.40	683988	8.08	382448	10.31
CCVIS 240-250510/2		839828	5.40	711442	8.08	436781	10.32

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.: 240-70005-1

SDG No.:

Sample No.: CCVIS 240-250510/2 Date Analyzed: 10/09/2016 12:11

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX958905.D Heated Purge: (Y/N) N

Calibration ID: 35813

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		839828	5.40	711442	8.08	436781	10.32
UPPER LIMIT		1679656	5.90	1422884	8.58	873562	10.82
LOWER LIMIT		419914	4.90	355721	7.58	218391	9.82
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-250510/3		845568	5.40	727717	8.08	445115	10.31
CCV 240-250510/4		836882	5.40	706216	8.08	397684	10.32
MB 240-250510/6		786851	5.40	667462	8.08	382759	10.31
240-70005-41	EL-SW01A-092616	784865	5.40	677262	8.08	372004	10.32
240-70005-42	EL-SW01B-092616	770308	5.41	688790	8.08	378286	10.32
240-70005-43	EL-SW01C-092616	760147	5.40	663284	8.08	378627	10.32
240-70005-44	EL-SW01D-092616	778604	5.41	662547	8.08	385443	10.32
240-70005-45	TB-092616	766799	5.41	668123	8.08	370127	10.32

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: A3UX16 Start Date: 09/02/2016 17:51

Analysis Batch Number: 245431 End Date: 09/03/2016 01:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-245431/1		09/02/2016 17:51	1	BFB4965.D	DB-624 0.18(mm)
STD8260 240-245431/6 IC		09/02/2016 18:19	1	UXM7645.D	DB-624 0.18(mm)
STD8260 240-245431/7 IC		09/02/2016 18:42	1	UXM7646.D	DB-624 0.18(mm)
STD8260 240-245431/8 IC		09/02/2016 19:05	1	UXM7647.D	DB-624 0.18(mm)
ICIS 240-245431/9		09/02/2016 19:28	1	UXM7648.D	DB-624 0.18(mm)
STD8260 240-245431/10 IC		09/02/2016 19:51	1	UXM7649.D	DB-624 0.18(mm)
STD8260 240-245431/11 IC		09/02/2016 20:14	1	UXM7650.D	DB-624 0.18(mm)
STDA9 240-245431/13 IC		09/02/2016 21:00	1	UXM7652.D	DB-624 0.18(mm)
STDA9 240-245431/14 IC		09/02/2016 21:23	1	UXM7653.D	DB-624 0.18(mm)
STDA9 240-245431/15 IC		09/02/2016 21:46	1	UXM7654.D	DB-624 0.18(mm)
STDA9 240-245431/16 IC		09/02/2016 22:10	1	UXM7655.D	DB-624 0.18(mm)
STDA9 240-245431/17 IC		09/02/2016 22:32	1	UXM7656.D	DB-624 0.18(mm)
STDA9 240-245431/18 IC		09/02/2016 22:56	1	UXM7657.D	DB-624 0.18(mm)
ICV 240-245431/20		09/02/2016 23:42	1	UXM7659.D	DB-624 0.18(mm)
ICV 240-245431/21		09/03/2016 00:05	1	UXM7660.D	DB-624 0.18(mm)
MDLV 240-245431/22		09/03/2016 00:28	1		DB-624 0.18(mm)
MDLV 240-245431/23		09/03/2016 00:51	1		DB-624 0.18(mm)
MDLV 240-245431/24		09/03/2016 01:14	1		DB-624 0.18(mm)
ZZZZZ		09/03/2016 01:38	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: A3UX16 Start Date: 09/06/2016 15:20

Analysis Batch Number: 245670 End Date: 09/07/2016 00:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-245670/1		09/06/2016 15:20	1	BFB4966.D	DB-624 0.18(mm)
CCVIS 240-245670/3		09/06/2016 15:46	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 16:09	1		DB-624 0.18(mm)
CCV 240-245670/4		09/06/2016 16:32	1		DB-624 0.18(mm)
MDLV 240-245670/6		09/06/2016 16:56	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 17:19	1		DB-624 0.18(mm)
DOWSTD 240-245670/9 IC		09/06/2016 18:05	1	UXM7672.D	DB-624 0.18(mm)
DOWSTD 240-245670/10 IC		09/06/2016 18:42	1	UXM7673.D	DB-624 0.18(mm)
DOWSTD 240-245670/11 IC		09/06/2016 19:06	1	UXM7674.D	DB-624 0.18(mm)
DOWSTD 240-245670/12 IC		09/06/2016 19:31	1	UXM7675.D	DB-624 0.18(mm)
DOWSTD 240-245670/13 IC		09/06/2016 19:55	1	UXM7676.D	DB-624 0.18(mm)
DOWSTD 240-245670/14 IC		09/06/2016 20:18	1	UXM7677.D	DB-624 0.18(mm)
ICV 240-245670/16		09/06/2016 21:05	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 21:05	1		DB-624 0.18(mm)
MDLV 240-245670/17		09/06/2016 21:29	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 21:52	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 22:15	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 22:38	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 23:02	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 23:25	1		DB-624 0.18(mm)
ZZZZZ		09/06/2016 23:48	1		DB-624 0.18(mm)
ZZZZZ		09/07/2016 00:12	1		DB-624 0.18(mm)
ZZZZZ		09/07/2016 00:35	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: A3UX16 Start Date: 10/06/2016 15:47

Analysis Batch Number: 250232 End Date: 10/07/2016 01:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-250232/1		10/06/2016 15:47	1	BFB5008.D	DB-624 0.18(mm)
CCVIS 240-250232/3		10/06/2016 16:12	1	UXM8431.D	DB-624 0.18(mm)
LCS 240-250232/4		10/06/2016 16:35	1	UXM8432.D	DB-624 0.18(mm)
CCV 240-250232/5		10/06/2016 16:59	1	UXM8433.D	DB-624 0.18(mm)
MDLV 240-250232/6		10/06/2016 17:22	1		DB-624 0.18(mm)
MB 240-250232/7		10/06/2016 17:45	1	UXM8435.D	DB-624 0.18(mm)
240-70005-1		10/06/2016 18:08	1	UXM8436.D	DB-624 0.18(mm)
240-70005-2		10/06/2016 18:31	1	UXM8437.D	DB-624 0.18(mm)
240-70005-3		10/06/2016 18:54	1	UXM8438.D	DB-624 0.18(mm)
240-70005-4		10/06/2016 19:17	1	UXM8439.D	DB-624 0.18(mm)
240-70005-5		10/06/2016 19:40	1	UXM8440.D	DB-624 0.18(mm)
240-70005-6		10/06/2016 20:04	1	UXM8441.D	DB-624 0.18(mm)
240-70005-7		10/06/2016 20:27	1	UXM8442.D	DB-624 0.18(mm)
240-70005-8		10/06/2016 20:50	1	UXM8443.D	DB-624 0.18(mm)
240-70005-9		10/06/2016 21:13	1	UXM8444.D	DB-624 0.18(mm)
240-70005-10		10/06/2016 21:37	1	UXM8445.D	DB-624 0.18(mm)
240-70005-11		10/06/2016 22:00	1	UXM8446.D	DB-624 0.18(mm)
240-70005-12		10/06/2016 22:23	1	UXM8447.D	DB-624 0.18(mm)
240-70005-13		10/06/2016 22:47	1	UXM8448.D	DB-624 0.18(mm)
240-70005-14		10/06/2016 23:10	1	UXM8449.D	DB-624 0.18(mm)
240-70005-15		10/06/2016 23:33	1	UXM8450.D	DB-624 0.18(mm)
240-70005-16		10/06/2016 23:56	1	UXM8451.D	DB-624 0.18(mm)
240-70005-17		10/07/2016 00:20	1	UXM8452.D	DB-624 0.18(mm)
240-70005-18		10/07/2016 00:43	1	UXM8453.D	DB-624 0.18(mm)
240-70005-19		10/07/2016 01:06	1	UXM8454.D	DB-624 0.18(mm)
240-70005-20		10/07/2016 01:29	1	UXM8455.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: A3UX16 Start Date: 10/07/2016 13:05

Analysis Batch Number: 250386 End Date: 10/07/2016 22:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-250386/1		10/07/2016 13:05	1	BFB5009.D	DB-624 0.18(mm)
CCVIS 240-250386/2		10/07/2016 13:32	1	UXM8480.D	DB-624 0.18(mm)
LCS 240-250386/3		10/07/2016 14:01	1	UXM8481.D	DB-624 0.18(mm)
MDLV 240-250386/4		10/07/2016 14:24	1		DB-624 0.18(mm)
CCV 240-250386/5		10/07/2016 14:48	1	UXM8483.D	DB-624 0.18(mm)
MB 240-250386/6		10/07/2016 15:11	1	UXM8484.D	DB-624 0.18(mm)
240-70005-21		10/07/2016 15:34	1	UXM8485.D	DB-624 0.18(mm)
240-70005-22		10/07/2016 15:58	1	UXM8486.D	DB-624 0.18(mm)
240-70005-23		10/07/2016 16:22	1	UXM8487.D	DB-624 0.18(mm)
240-70005-24		10/07/2016 16:45	1	UXM8488.D	DB-624 0.18(mm)
240-70005-25		10/07/2016 17:08	1	UXM8489.D	DB-624 0.18(mm)
240-70005-26		10/07/2016 17:31	1	UXM8490.D	DB-624 0.18(mm)
240-70005-27		10/07/2016 17:55	1	UXM8491.D	DB-624 0.18(mm)
240-70005-28		10/07/2016 18:18	1	UXM8492.D	DB-624 0.18(mm)
240-70005-29		10/07/2016 18:41	1	UXM8493.D	DB-624 0.18(mm)
240-70005-30		10/07/2016 19:04	1	UXM8494.D	DB-624 0.18(mm)
240-70005-31		10/07/2016 19:27	1	UXM8495.D	DB-624 0.18(mm)
240-70005-32		10/07/2016 19:51	1	UXM8496.D	DB-624 0.18(mm)
240-70005-33		10/07/2016 20:14	1	UXM8497.D	DB-624 0.18(mm)
240-70005-34		10/07/2016 20:37	1	UXM8498.D	DB-624 0.18(mm)
240-70005-35		10/07/2016 21:01	1	UXM8499.D	DB-624 0.18(mm)
240-70005-36		10/07/2016 21:24	1	UXM8500.D	DB-624 0.18(mm)
240-70005-37		10/07/2016 21:47	1	UXM8501.D	DB-624 0.18(mm)
240-70005-38		10/07/2016 22:10	1	UXM8502.D	DB-624 0.18(mm)
240-70005-39		10/07/2016 22:33	1	UXM8503.D	DB-624 0.18(mm)
240-70005-40		10/07/2016 22:56	1	UXM8504.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: A3UX9 Start Date: 08/24/2016 20:13

Analysis Batch Number: 244166 End Date: 08/25/2016 04:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-244166/1		08/24/2016 20:13	1	BFB3395.D	DB-624 0.18(mm)
STD8260 240-244166/8 IC		08/24/2016 20:38	1	UX958010.D	DB-624 0.18(mm)
STD8260 240-244166/9 IC		08/24/2016 21:01	1	UX958011.D	DB-624 0.18(mm)
STD8260 240-244166/10 IC		08/24/2016 21:25	1	UX958012.D	DB-624 0.18(mm)
ICIS 240-244166/11		08/24/2016 21:49	1	UX958013.D	DB-624 0.18(mm)
STD8260 240-244166/12 IC		08/24/2016 22:13	1	UX958014.D	DB-624 0.18(mm)
STD8260 240-244166/13 IC		08/24/2016 22:37	1	UX958015.D	DB-624 0.18(mm)
STDA9 240-244166/15 IC		08/24/2016 23:25	1	UX958017.D	DB-624 0.18(mm)
STDA9 240-244166/16 IC		08/24/2016 23:49	1	UX958018.D	DB-624 0.18(mm)
STDA9 240-244166/17 IC		08/25/2016 00:13	1	UX958019.D	DB-624 0.18(mm)
STDA9 240-244166/18 IC		08/25/2016 00:36	1	UX958020.D	DB-624 0.18(mm)
STDA9 240-244166/19 IC		08/25/2016 01:01	1	UX958021.D	DB-624 0.18(mm)
STDA9 240-244166/20 IC		08/25/2016 01:25	1	UX958022.D	DB-624 0.18(mm)
ICV 240-244166/22		08/25/2016 02:13	1	UX958024.D	DB-624 0.18(mm)
ICV 240-244166/23		08/25/2016 02:37	1	UX958025.D	DB-624 0.18(mm)
MDLV 240-244166/24		08/25/2016 03:01	1		DB-624 0.18(mm)
MDLV 240-244166/25		08/25/2016 03:25	1		DB-624 0.18(mm)
MDLV 240-244166/26		08/25/2016 03:49	1		DB-624 0.18(mm)
ZZZZZ		08/25/2016 04:13	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: A3UX9 Start Date: 10/09/2016 10:56

Analysis Batch Number: 250510 End Date: 10/09/2016 16:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-250510/1		10/09/2016 10:56	1	BFB3454.D	DB-624 0.18(mm)
CCVIS 240-250510/2		10/09/2016 12:11	1	UX958905.D	DB-624 0.18(mm)
LCS 240-250510/3		10/09/2016 12:35	1	UX958906.D	DB-624 0.18(mm)
CCV 240-250510/4		10/09/2016 13:01	1	UX958907.D	DB-624 0.18(mm)
MDLV 240-250510/5		10/09/2016 13:25	1		DB-624 0.18(mm)
MB 240-250510/6		10/09/2016 13:50	1	UX958909.D	DB-624 0.18(mm)
240-70005-41		10/09/2016 14:41	1	UX958911.D	DB-624 0.18(mm)
240-70005-42		10/09/2016 15:05	1	UX958912.D	DB-624 0.18(mm)
240-70005-43		10/09/2016 15:30	1	UX958913.D	DB-624 0.18(mm)
240-70005-44		10/09/2016 15:54	1	UX958914.D	DB-624 0.18(mm)
240-70005-45		10/09/2016 16:18	1	UX958915.D	DB-624 0.18(mm)

METALS

US EPA Tune Check Sample Report

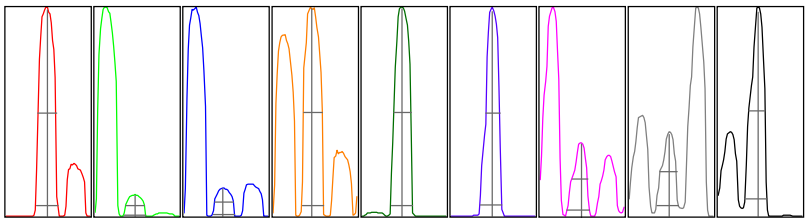
Batch Folder D:\Analytical Runs\I10100716A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	41687	0.49	5.00	
24	105616	0.39	5.00	
25	14149	0.50	5.00	
26	16570	0.61	5.00	
59	153738	0.34	5.00	
115	247918	0.39	5.00	
206	81714	0.36	5.00	
207	70530	0.28	5.00	
208	168007	0.69	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	41915	41821	41757	41456	41483
24	105893	105861	105775	105658	104891
25	14175	14143	14150	14237	14041
26	16674	16604	16403	16587	16580
59	153964	154548	153478	153473	153227
115	247844	247545	247312	247295	249595
206	82203	81764	81567	81583	81455
207	70261	70728	70437	70719	70502
208	166899	167593	167784	167795	169961

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6833	9.00	8.9 - 9.1		0.767	0.850	
24	17144	23.95	23.9 - 24.1		0.780	0.850	
25	2291	24.90	24.9 - 25.1		0.785	0.850	
26	2665	25.90	25.9 - 26.1		0.785	0.850	
59	25777	58.95	58.9 - 59.1		0.785	0.850	
115	46375	115.00	114.9 - 115.1		0.774	0.850	
206	14897	206.00	205.9 - 206.1		0.790	0.850	
207	12380	206.95	206.9 - 207.1		0.779	0.850	
208	30869	207.95	207.9 - 208.1		0.777	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.40	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.70	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.8	V	Deflect	14.4	V
Extract 2	-125.0	V	Cell Entrance	-50	V	Plate Bias	-40	V
Omega Bias	-70	V	Cell Exit	-70	V			

Cell Parameters

US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	5.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	ICV 240-250567/7 10/07/2016 10:54				CCV 240-250567/118 10/07/2016 18:44				CCV 240-250567/130 10/07/2016 19:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	40.4		40.0	101	47.2		50.0	94	47.5		50.0	95
Barium	39.5		40.0	99	50.2		50.0	100	48.2		50.0	96
Beryllium	39.5		40.0	99	46.4		50.0	93	45.9		50.0	92
Calcium	19500		20000	98	22800		25000	91				
Lead	40.0		40.0	100	50.7		50.0	101	49.3		50.0	99
Molybdenum	39.9		40.0	100								
Silver	40.1		40.0	100	47.0		50.0	94	47.0		50.0	94
Thallium	39.7		40.0	99	51.0		50.0	102	49.7		50.0	99
Vanadium	41.5		40.0	104	54.6		50.0	109	53.5		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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	CCV 240-250567/142 10/07/2016 20:24				CCV 240-250567/154 10/07/2016 21:13				CCV 240-250567/166 10/07/2016 22:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	51.6		50.0	103	52.9		50.0	106	48.7		50.0	97
Barium	53.3		50.0	107					51.3		50.0	103
Beryllium	51.3		50.0	103	49.4		50.0	99	49.0		50.0	98
Calcium	24200		25000	97	24900		25000	100	23200		25000	93
Lead	53.4		50.0	107					52.3		50.0	105
Molybdenum	45.6		50.0	91	47.5		50.0	95				
Silver	51.5		50.0	103	53.0		50.0	106	49.0		50.0	98
Thallium	53.9		50.0	108					52.7		50.0	105
Vanadium												

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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	CCV 240-250567/178 10/07/2016 22:53				CCV 240-250567/183 10/07/2016 23:14							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	47.3		50.0	95	48.0		50.0	96				
Barium	51.2		50.0	102	50.5		50.0	101				
Beryllium	47.1		50.0	94	47.3		50.0	95				
Calcium	22900		25000	92	22500		25000	90				
Lead	50.5		50.0	101	51.0		50.0	102				
Molybdenum												
Silver	48.6		50.0	97	48.4		50.0	97				
Thallium	51.0		50.0	102	51.8		50.0	104				
Vanadium												

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	ICV 240-250950/7 10/11/2016 19:35				CCV 240-250950/35 10/11/2016 21:35				CCV 240-250950/47 10/11/2016 22:25			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	39.0		40.0	97	49.6		50.0	99	49.4		50.0	99
Arsenic	39.6		40.0	99	49.3		50.0	99	49.9		50.0	100
Barium	39.4		40.0	98	50.2		50.0	100	50.5		50.0	101
Beryllium	41.5		40.0	104	52.1		50.0	104	50.1		50.0	100
Cadmium	40.1		40.0	100	49.9		50.0	100	49.5		50.0	99
Chromium	40.4		40.0	101	49.8		50.0	100	49.2		50.0	98
Cobalt	41.5		40.0	104	51.4		50.0	103	50.2		50.0	100
Lead	42.6		40.0	106	48.7		50.0	97	49.1		50.0	98
Magnesium	20400		20000	102	24800		25000	99	24200		25000	97
Molybdenum	40.1		40.0	100	50.8		50.0	102	51.4		50.0	103
Nickel	41.1		40.0	103	50.5		50.0	101	50.5		50.0	101
Selenium	41.2		40.0	103	50.1		50.0	100	51.3		50.0	103
Silver	43.0		40.0	108	52.3		50.0	105	52.8		50.0	106
Thallium	41.8		40.0	104	48.8		50.0	98	49.0		50.0	98
Tungsten	40.3		40.0	101	50.4		50.0	101	49.8		50.0	100
Vanadium	41.1		40.0	103	49.4		50.0	99	49.7		50.0	99
Zinc	41.6		40.0	104	51.3		50.0	103	50.1		50.0	100
Calcium	19800		20000	99	24600		25000	98	24500		25000	98
Copper	41.0		40.0	102	49.7		50.0	99	48.6		50.0	97

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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	CCV 240-250950/59 10/11/2016 23:17				CCV 240-250950/71 10/12/2016 00:09				CCV 240-250950/83 10/12/2016 01:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	47.5		50.0	95	51.3		50.0	103				
Arsenic	48.9		50.0	98	51.4		50.0	103	55.2		50.0	110
Barium	48.8		50.0	98	51.8		50.0	104				
Beryllium	49.3		50.0	99	50.5		50.0	101	48.4		50.0	97
Cadmium	47.6		50.0	95	50.9		50.0	102				
Chromium					49.8		50.0	100	55.2		50.0	110
Cobalt					51.1		50.0	102				
Lead	46.4		50.0	93	50.5		50.0	101	55.0		50.0	110
Magnesium					24000		25000	96	26700		25000	107
Molybdenum	49.9		50.0	100	52.2		50.0	104				
Nickel					49.4		50.0	99				
Selenium	49.8		50.0	100	54.0		50.0	108				
Silver	51.0		50.0	102	53.4		50.0	107				
Thallium	46.0		50.0	92	50.1		50.0	100	54.1		50.0	108
Tungsten	47.1		50.0	94	51.9		50.0	104				
Vanadium					50.6		50.0	101				
Zinc					50.5		50.0	101				
Calcium					24600		25000	99	27400		25000	109
Copper					48.6		50.0	97	54.9		50.0	110

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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	CCV 240-250950/95 10/12/2016 01:52											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony												
Arsenic	50.3		50.0	101								
Barium	51.0		50.0	102								
Beryllium	48.6		50.0	97								
Cadmium	49.7		50.0	99								
Chromium	49.4		50.0	99								
Cobalt	50.8		50.0	102								
Lead	49.1		50.0	98								
Magnesium	24300		25000	97								
Molybdenum	51.7		50.0	103								
Nickel	49.0		50.0	98								
Selenium	50.7		50.0	101								
Silver	53.5		50.0	107								
Thallium	49.1		50.0	98								
Tungsten	50.4		50.0	101								
Vanadium	50.3		50.0	101								
Zinc	50.0		50.0	100								
Calcium	24700		25000	99								
Copper	48.0		50.0	96								

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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	ICV 240-251370/7 10/13/2016 13:25				CCV 240-251370/77 10/13/2016 18:25				CCV 240-251370/89 10/13/2016 19:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	40.7		40.0	102	52.1		50.0	104	52.0		50.0	104
Arsenic	40.3		40.0	101	47.8		50.0	96	47.6		50.0	95
Barium	39.4		40.0	98	52.3		50.0	105	51.7		50.0	103
Beryllium	39.2		40.0	98	53.8		50.0	108	51.8		50.0	104
Cadmium	40.4		40.0	101	51.0		50.0	102	50.0		50.0	100
Calcium	20200		20000	101	25300		25000	101	25000		25000	100
Chromium	40.6		40.0	102	49.6		50.0	99	49.0		50.0	98
Cobalt	41.1		40.0	103	50.5		50.0	101	50.3		50.0	101
Copper	41.2		40.0	103	50.6		50.0	101	50.1		50.0	100
Lead	40.6		40.0	102	52.5		50.0	105	51.7		50.0	103
Magnesium	20300		20000	102	25200		25000	101	24200		25000	97
Molybdenum	40.1		40.0	100	52.2		50.0	104	51.9		50.0	104
Nickel	41.6		40.0	104	50.7		50.0	101	50.2		50.0	100
Selenium	41.1		40.0	103	49.7		50.0	99	48.9		50.0	98
Silver	38.9		40.0	97	49.2		50.0	98	49.4		50.0	99
Thallium	39.5		40.0	99	51.0		50.0	102	49.1		50.0	98
Tungsten	37.6		40.0	94	49.5		50.0	99	48.3		50.0	97
Vanadium	41.1		40.0	103	49.5		50.0	99	49.5		50.0	99
Zinc	42.1		40.0	105	51.2		50.0	102	51.2		50.0	102

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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	CCV 240-251370/101 10/13/2016 20:08				CCV 240-251370/113 10/13/2016 20:59				CCV 240-251370/125 10/13/2016 21:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	52.4		50.0	105	51.0		50.0	102	51.5		50.0	103
Arsenic	48.1		50.0	96	47.7		50.0	95	48.0		50.0	96
Barium	52.2		50.0	104	50.4		50.0	101	51.0		50.0	102
Beryllium	52.2		50.0	104	51.9		50.0	104	52.0		50.0	104
Cadmium	50.1		50.0	100	49.4		50.0	99	49.7		50.0	99
Calcium	25300		25000	101	24700		25000	99	25600		25000	102
Chromium	50.0		50.0	100	49.2		50.0	98	50.1		50.0	100
Cobalt	51.1		50.0	102	49.7		50.0	99	51.3		50.0	103
Copper	51.3		50.0	103	50.0		50.0	100	51.1		50.0	102
Lead	52.2		50.0	104	51.0		50.0	102	51.4		50.0	103
Magnesium	24400		25000	98	24300		25000	97	24800		25000	99
Molybdenum	52.8		50.0	106	51.8		50.0	104	52.7		50.0	105
Nickel	50.8		50.0	102	49.6		50.0	99	51.4		50.0	103
Selenium	50.1		50.0	100	49.0		50.0	98	49.8		50.0	100
Silver	50.2		50.0	100	48.9		50.0	98	49.9		50.0	100
Thallium	50.2		50.0	100	50.6		50.0	101	50.9		50.0	102
Tungsten	50.1		50.0	100	48.4		50.0	97	49.2		50.0	98
Vanadium	50.6		50.0	101	49.4		50.0	99	50.2		50.0	100
Zinc	51.7		50.0	103	50.1		50.0	100	51.9		50.0	104

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.: 240-70005-1

SDG No.:

ICV Source: MTMSICVW_00072 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00178

Analyte	CCV 240-251370/131 10/13/2016 22:17											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.0		50.0	102								
Arsenic	47.6		50.0	95								
Barium	50.0		50.0	100								
Beryllium	51.1		50.0	102								
Cadmium	48.9		50.0	98								
Calcium	24800		25000	99								
Chromium	48.4		50.0	97								
Cobalt	49.8		50.0	100								
Copper	49.9		50.0	100								
Lead	50.6		50.0	101								
Magnesium	24200		25000	97								
Molybdenum	51.4		50.0	103								
Nickel	49.8		50.0	100								
Selenium	48.9		50.0	98								
Silver	48.9		50.0	98								
Thallium	49.6		50.0	99								
Tungsten	48.3		50.0	97								
Vanadium	48.9		50.0	98								
Zinc	50.1		50.0	100								

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.: 240-70005-1

SDG No.:

ICV Source: MTHgICV_00001_00075 Concentration Units: ug/L

CCV Source: MTHGCALW_01322

Analyte	ICV 240-248755/7-A 09/29/2016 06:41				CCV 240-248755/10-A 09/29/2016 09:37				CCV 240-248755/10-A 09/29/2016 10:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.98		5.00	100	5.06		5.00	101	5.07		5.00	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.: 240-70005-1

SDG No.:

ICV Source: MTHgICV_00001_00075 Concentration Units: ug/L

CCV Source: MTHGCALW_01322

Analyte	CCV 240-248755/10-A 09/29/2016 10:26				CCV 240-248755/10-A 09/29/2016 10:49				CCV 240-248755/10-A 09/29/2016 11:13			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.12		5.00	102	5.07		5.00	101	5.09		5.00	102

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.: 240-70005-1

SDG No.:

ICV Source: MTHgICV_00001_00075 Concentration Units: ug/L

CCV Source: MTHGCALW_01322

Analyte	CCV 240-248755/10-A 09/29/2016 11:36				CCV 240-248755/10-A 09/29/2016 12:00				CCV 240-248755/10-A 09/29/2016 12:24			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.07		5.00	101	5.02		5.00	100	4.89		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.: 240-70005-1

SDG No.:

ICV Source: MTHgICV_00001_00075 Concentration Units: ug/L

CCV Source: MTHGCALW_01322

Analyte	CCV 240-248755/10-A 09/29/2016 12:49											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.08		5.00	102								

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.: 240-70005-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-250567/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00044

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.22		111	50-150
Arsenic	5.00	4.96	J	99	50-150
Barium	5.00	4.85	J	97	50-150
Beryllium	1.00	0.927	J	93	50-150
Cadmium	1.00	1.01		101	50-150
Chromium	2.00	1.99	J	99	50-150
Cobalt	1.00	1.03		103	50-150
Copper	2.00	2.16		108	50-150
Lead	1.00	1.03		103	50-150
Molybdenum	5.00	5.13	J	103	50-150
Nickel	2.00	2.20		110	50-150
Selenium	5.00	5.47		109	50-150
Silver	1.00	1.01		101	50-150
Thallium	1.00	1.03		103	50-150
Vanadium	5.00	5.01		100	50-150
Zinc	20.0	20.2		101	50-150
Calcium	1000	981	J	98	50-150
Magnesium	1000	1010		101	50-150
Tungsten	10.0	9.23	J	92	50-150

Lab Sample ID: CRI 240-250950/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00044

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	1.92	J	96	50-150
Arsenic	5.00	4.85	J	97	50-150
Barium	5.00	5.02		100	50-150
Beryllium	1.00	0.944	J	94	50-150
Cadmium	1.00	1.02		102	50-150
Chromium	2.00	2.10		105	50-150
Cobalt	1.00	1.08		108	50-150
Lead	1.00	1.11		111	50-150
Molybdenum	5.00	5.02	J	100	50-150
Nickel	2.00	1.96	J	98	50-150
Selenium	5.00	5.19		104	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.: 240-70005-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-250950/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00044

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	1.00	1.10		110	50-150
Thallium	1.00	1.15		115	50-150
Vanadium	5.00	4.98	J	100	50-150
Zinc	20.0	21.7		108	50-150
Calcium	1000	1050		105	50-150
Magnesium	1000	1070		107	50-150
Tungsten	10.0	10.1		101	50-150

Lab Sample ID: CRI 240-251370/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00044

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.00		100	50-150
Arsenic	5.00	4.83	J	97	50-150
Barium	5.00	4.82	J	96	50-150
Beryllium	1.00	0.808	J	81	50-150
Cadmium	1.00	1.02		102	50-150
Chromium	2.00	2.01		100	50-150
Cobalt	1.00	1.03		103	50-150
Copper	2.00	2.14		107	50-150
Lead	1.00	1.03		103	50-150
Molybdenum	5.00	5.11	J	102	50-150
Nickel	2.00	2.11		106	50-150
Selenium	5.00	5.41		108	50-150
Silver	1.00	1.01		101	50-150
Thallium	1.00	1.01		101	50-150
Vanadium	5.00	4.85	J	97	50-150
Zinc	20.0	21.0		105	50-150
Calcium	1000	982	J	98	50-150
Magnesium	1000	995	J	99	50-150
Tungsten	10.0	9.54	J	95	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.: 240-70005-1

SDG No.:

Method: 7470A Instrument ID: H2

Lab Sample ID: CRA 240-248755/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_01322

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.162	J	81	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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-250567/8 10/07/2016 10:58		CCB 240-250567/119 10/07/2016 18:49		CCB 240-250567/131 10/07/2016 19:38		CCB 240-250567/143 10/07/2016 20:28	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.558	J	0.580	J	0.620	J	0.504	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	0.127	J	0.0710	J	1.0	U
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	0.0520	J	0.0290	J	0.0230	J
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	0.243	J	0.227	J	0.165	J
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	0.484	J	0.532	J	0.450	J	0.462	J
Nickel	2.0	2.0	U	0.248	J	2.0	U	2.0	U
Selenium	5.0	5.0	U	0.967	J	3.05	J	0.858	J
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	1.0	U	0.0760	J	1.0	U	1.0	U
Tungsten	10	0.844	J	1.40	J	1.19	J	1.09	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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-250567/155 10/07/2016 21:17		CCB 240-250567/167 10/07/2016 22:07		CCB 240-250567/179 10/07/2016 22:57		CCB 240-250567/184 10/07/2016 23:18	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.828	J	0.575	J	0.373	J	0.350	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	0.0680	J	1.0	U	1.0	U	1.0	U
Cadmium	1.0	0.0800	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	0.0830	J	0.0230	J	0.0220	J	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	0.233	J	0.149	J	0.119	J	0.119	J
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	0.586	J	2.44	J	0.436	J	0.438	J
Nickel	2.0	0.240	J	2.0	U	2.0	U	2.0	U
Selenium	5.0	0.648	J	0.462	J	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	1.53	J	1.47	J	1.08	J	1.10	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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-250950/8 10/11/2016 19:39		CCB 240-250950/36 10/11/2016 21:39		CCB 240-250950/48 10/11/2016 22:29		CCB 240-250950/60 10/11/2016 23:21	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	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	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	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	0.0430	J	1.0	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	10	U	10	U	10	U	10	U
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	0.750	J	1.05	J	0.408	J
Silver	1.0	1.0	U	0.0200	J	0.0510	J	1.0	U
Thallium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Tungsten	10	10	U	10	U	10	U	10	U
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
Calcium	1000	1000	U	1000	U	1000	U	1000	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-250950/72 10/12/2016 00:13		CCB 240-250950/84 10/12/2016 01:04		CCB 240-250950/96 10/12/2016 01:56			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	1.21	J		
Arsenic	5.0	5.0	U	5.0	U	5.0	U		
Barium	5.0	5.0	U	5.0	U	5.0	U		
Beryllium	1.0	0.0800	J	0.0700	J	1.0	U		
Cadmium	1.0	1.0	U	1.0	U	1.0	U		
Chromium	2.0	2.0	U	2.0	U	2.0	U		
Cobalt	1.0	0.0360	J	1.0	U	1.0	U		
Lead	1.0	1.0	U	1.0	U	1.0	U		
Magnesium	1000	1000	U	1000	U	1000	U		
Molybdenum	10	0.280	J	1.23	J	0.265	J		
Nickel	2.0	2.0	U	2.0	U	2.0	U		
Selenium	5.0	1.09	J	0.593	J	0.422	J		
Silver	1.0	1.0	U	1.0	U	1.0	U		
Thallium	1.0	1.0	U	1.0	U	1.0	U		
Tungsten	10	10	U	10	U	10	U		
Vanadium	5.0	5.0	U	5.0	U	5.0	U		
Zinc	20	20	U	20	U	20	U		
Calcium	1000	1000	U	1000	U	1000	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-251370/8 10/13/2016 13:30		CCB 240-251370/78 10/13/2016 18:29		CCB 240-251370/90 10/13/2016 19:21		CCB 240-251370/102 10/13/2016 20:12	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	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	1.0	U	0.0700	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	0.0410	J
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	0.115	J	0.114	J	0.150	J
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	10	U	10	U	10	U	10	U
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	10	U	10	U	10	U	10	U
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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-251370/114 10/13/2016 21:04		CCB 240-251370/126 10/13/2016 21:55		CCB 240-251370/132 10/13/2016 22:21			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U		
Arsenic	5.0	5.0	U	5.0	U	5.0	U		
Barium	5.0	5.0	U	5.0	U	5.0	U		
Beryllium	1.0	1.0	U	1.0	U	1.0	U		
Cadmium	1.0	1.0	U	1.0	U	1.0	U		
Calcium	1000	1000	U	1000	U	1000	U		
Chromium	2.0	2.0	U	2.0	U	2.0	U		
Cobalt	1.0	1.0	U	1.0	U	1.0	U		
Copper	2.0	2.0	U	2.0	U	2.0	U		
Lead	1.0	0.111	J	1.0	U	0.111	J		
Magnesium	1000	1000	U	1000	U	1000	U		
Molybdenum	10	10	U	10	U	10	U		
Nickel	2.0	2.0	U	2.0	U	2.0	U		
Selenium	5.0	5.0	U	5.0	U	5.0	U		
Silver	1.0	1.0	U	1.0	U	1.0	U		
Thallium	1.0	1.0	U	1.0	U	1.0	U		
Tungsten	10	10	U	10	U	10	U		
Vanadium	5.0	5.0	U	5.0	U	5.0	U		
Zinc	20	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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-248755/8-A 09/29/2016 06:43		CCB 240-248755/11-A 09/29/2016 09:39		CCB 240-248755/11-A 09/29/2016 10:04		CCB 240-248755/11-A 09/29/2016 10:28	
		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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-248755/11-A 09/29/2016 10:51		CCB 240-248755/11-A 09/29/2016 11:15		CCB 240-248755/11-A 09/29/2016 11:38		CCB 240-248755/11-A 09/29/2016 12:02	
		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.: 240-70005-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-248755/11-A 09/29/2016 12:26		CCB 240-248755/11-A 09/29/2016 12:51					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-248806/1-A

Instrument Code: I10 Batch No.: 250950

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	0.342	J		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	1.86	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	0.676	J		6020
7440-48-4	Cobalt	1.0	U		6020
7439-92-1	Lead	0.310	J		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	2.20	J		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	20.5			6020
7439-95-4	Magnesium	163	J		6020
7440-33-7	Tungsten	10	U		6020

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-248800/1-A

Instrument Code: I10 Batch No.: 251370

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

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-248806/1-A

Instrument Code: I10 Batch No.: 251370

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	1.85	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	0.402	J		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	0.960	J		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	0.312	J		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	18.7	J		6020
7440-70-2	Calcium	490	J		6020
7439-95-4	Magnesium	145	J		6020
7440-33-7	Tungsten	10	U		6020

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-248805/1-A

Instrument Code: H2 Batch No.: 249045

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-248812/1-A

Instrument Code: H2 Batch No.: 249045

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Lab Sample ID: ICSA 240-250567/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00073

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	*50000*	*51362*	*103*
Antimony		*0.222*	
Arsenic		*0.0710*	
Barium		*0.0510*	
Beryllium		*0.0090*	
Boron		*4.08*	
Cadmium		*0.0570*	
Calcium	*50000*	*50455*	*101*
Chromium		*0.655*	
Cobalt		*0.0080*	
Copper		*0.331*	
Iron	*50000*	*50440*	*101*
Lead		*0.110*	
Lithium		*0.418*	
Magnesium	*50000*	*50468*	*101*
Manganese		*0.255*	
Molybdenum	*1000*	*1020*	*102*
Nickel		*0.0860*	
Potassium	*50000*	*49746*	*99*
Selenium		*0.0830*	
Silver		*0.0080*	
Sodium	*50000*	*50962*	*102*
Strontium		*0.336*	
Thallium		*0.0070*	
Tin		*-0.687*	
Titanium	*1000*	*1022*	*102*
Tungsten		*0.361*	
Vanadium		*0.0150*	
Zinc		*1.15*	

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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSAB 240-250567/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00070

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	*50000*	*51178*	*102*
Antimony	*100*	*102*	*102*
Arsenic	*100*	*99.3*	*99*
Barium	*100*	*101*	*101*
Beryllium	*100*	*103*	*103*
Boron	*100*	*122*	*122*
Cadmium	*100*	*101*	*101*
Calcium	*50000*	*50455*	*101*
Chromium	*100*	*104*	*104*
Cobalt	*100*	*104*	*104*
Copper	*100*	*104*	*104*
Iron	*50000*	*50969*	*102*
Lead	*100*	*106*	*106*
Lithium	*100*	*105*	*105*
Magnesium	*50000*	*51218*	*102*
Manganese	*100*	*101*	*101*
Molybdenum	*1100*	*1139*	*104*
Nickel	*100*	*104*	*104*
Potassium	*50000*	*49530*	*99*
Selenium	*100*	*98.7*	*99*
Silver	*100*	*99.0*	*99*
Sodium	*50000*	*51170*	*102*
Strontium	*100*	*98.4*	*98*
Thallium	*100*	*105*	*105*
Tin	*100*	*98.7*	*99*
Titanium	*1100*	*1138*	*103*
Tungsten	*100*	*107*	*107*
Vanadium	*100*	*102*	*102*
Zinc	*100*	*100*	*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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSA 240-250567/164 Instrument ID: I10

Lab File ID: 164ICSA.d ICS Source: MTMSICSAW_00073

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	*50000*	*64699*	*129*
Antimony		*0.248*	
Arsenic		*0.0710*	
Barium		*0.0490*	
Beryllium		*0.0200*	
Cadmium		*-0.0340*	
Calcium	*50000*	*47233*	*94*
Chromium		*0.764*	
Cobalt		*0.0120*	
Copper		*0.501*	
Iron	*50000*	*60501*	*121*
Lead		*0.264*	
Lithium		*0.197*	
Magnesium	*50000*	*64406*	*129*
Manganese		*0.252*	
Molybdenum	*1000*	*883*	*88*
Nickel		*0.124*	
Potassium	*50000*	*43027*	*86*
Selenium		*0.613*	
Silver		*0.0080*	
Sodium	*50000*	*61803*	*124*
Strontium		*0.247*	
Thallium		*0.0010*	
Tin		*-0.742*	
Titanium	*1000*	*1032*	*103*
Tungsten		*0.0980*	
Vanadium		*0.0050*	
Zinc		*0.770*	

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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSAB 240-250567/165 Instrument ID: I10

Lab File ID: 165ICAB.d ICS Source: MTMSICSABW_00070

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	*50000*	*66804*	*134*
Antimony	*100*	*122*	*122*
Arsenic	*100*	*97.7*	*98*
Barium	*100*	*105*	*105*
Beryllium	*100*	*100*	*100*
Boron	*100*	*120*	*120*
Cadmium	*100*	*129*	*129*
Calcium	*50000*	*49096*	*98*
Chromium	*100*	*124*	*124*
Cobalt	*100*	*143*	*143*
Iron	*50000*	*62075*	*124*
Lead	*100*	*111*	*111*
Lithium	*100*	*101*	*101*
Magnesium	*50000*	*66951*	*134*
Manganese	*100*	*112*	*112*
Molybdenum	*1100*	*1009*	*92*
Potassium	*50000*	*44852*	*90*
Selenium	*100*	*78.1*	*78*
Silver	*100*	*99.1*	*99*
Sodium	*50000*	*62854*	*126*
Strontium	*100*	*58.2*	*58*
Thallium	*100*	*117*	*117*
Tin	*100*	*113*	*113*
Titanium	*1100*	*1174*	*107*
Tungsten	*100*	*136*	*136*
Vanadium	*100*	*119*	*119*
Zinc	*100*	*77.4*	*77*

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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSA 240-250950/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00074

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0830**	
Arsenic		**0.0420**	
Barium		**0.0340**	
Beryllium		**0.0090**	
Cadmium		**0.0600**	
Chromium		**0.670**	
Cobalt		**0.0230**	
Lead		**0.123**	
Magnesium	**50000**	**49487**	**99**
Molybdenum	**1000**	**940**	**94**
Nickel		**-0.0800**	
Selenium		**0.0460**	
Silver		**0.0100**	
Thallium		**0.0060**	
Tungsten		**0.105**	
Vanadium		**0.0300**	
Zinc		**0.343**	
Aluminum	*50000*	*47649*	*95*
Boron		*1.12*	
Calcium	*50000*	*47425*	*95*
Copper		*-2.94*	
Iron	*50000*	*48477*	*97*
Lithium		*0.190*	
Manganese		*0.845*	
Potassium	*50000*	*47922*	*96*
Sodium	*50000*	*48905*	*98*
Strontium		*0.342*	
Tin		*0.0420*	
Titanium	*1000*	*956*	*96*

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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSAB 240-250950/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00071

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**95.0**	**95**
Arsenic	**100**	**98.1**	**98**
Barium	**100**	**98.8**	**99**
Beryllium	**100**	**103**	**103**
Cadmium	**100**	**97.2**	**97**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**102**	**102**
Lead	**100**	**98.4**	**98**
Magnesium	**50000**	**49822**	**100**
Molybdenum	**1100**	**1024**	**93**
Nickel	**100**	**101**	**101**
Selenium	**100**	**99.0**	**99**
Silver	**100**	**95.5**	**95**
Thallium	**100**	**98.7**	**99**
Tungsten	**100**	**97.0**	**97**
Vanadium	**100**	**99.6**	**100**
Zinc	**100**	**101**	**101**
Aluminum	*50000*	*47928*	*96*
Boron	*100*	*102*	*102*
Calcium	*50000*	*49345*	*99*
Copper	*100*	*101*	*101*
Iron	*50000*	*49605*	*99*
Lithium	*100*	*105*	*105*
Manganese	*100*	*104*	*104*
Potassium	*50000*	*49611*	*99*
Sodium	*50000*	*49268*	*99*
Strontium	*100*	*98.1*	*98*
Tin	*100*	*96.9*	*97*
Titanium	*1100*	*1048*	*95*

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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSA 240-251370/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00074

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0630**	
Arsenic		**0.0370**	
Barium		**0.0520**	
Beryllium		**-0.0030**	
Cadmium		**0.0450**	
Calcium	**50000**	**50570**	**101**
Chromium		**0.651**	
Cobalt		**0.0090**	
Copper		**0.312**	
Lead		**0.111**	
Magnesium	**50000**	**50800**	**102**
Molybdenum	**1000**	**1089**	**109**
Nickel		**0.0810**	
Selenium		**0.0210**	
Silver		**0.0170**	
Thallium		**0.0030**	
Tungsten		**0.114**	
Vanadium		**-0.0230**	
Zinc		**0.373**	
Aluminum	*50000*	*50955*	*102*
Boron		*1.35*	
Iron	*50000*	*50453*	*101*
Lithium		*0.135*	
Manganese		*0.169*	
Potassium	*50000*	*50290*	*101*
Sodium	*50000*	*50311*	*101*
Strontium		*0.321*	
Tin		*0.0740*	
Titanium	*1000*	*1003*	*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.: 240-70005-1

SDG No.:

Lab Sample ID: ICSAB 240-251370/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00071

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**100**	**100**
Arsenic	**100**	**99.0**	**99**
Barium	**100**	**99.3**	**99**
Beryllium	**100**	**116**	**116**
Cadmium	**100**	**98.4**	**98**
Calcium	**50000**	**50405**	**101**
Chromium	**100**	**102**	**102**
Cobalt	**100**	**103**	**103**
Copper	**100**	**102**	**102**
Lead	**100**	**104**	**104**
Magnesium	**50000**	**50434**	**101**
Molybdenum	**1100**	**1210**	**110**
Nickel	**100**	**103**	**103**
Selenium	**100**	**100**	**100**
Silver	**100**	**99.0**	**99**
Thallium	**100**	**102**	**102**
Tungsten	**100**	**102**	**102**
Vanadium	**100**	**101**	**101**
Zinc	**100**	**102**	**102**
Aluminum	*50000*	*51623*	*103*
Boron	*100*	*116*	*116*
Iron	*50000*	*50571*	*101*
Lithium	*100*	*113*	*113*
Manganese	*100*	*101*	*101*
Potassium	*50000*	*50597*	*101*
Sodium	*50000*	*49941*	*100*
Strontium	*100*	*102*	*102*
Tin	*100*	*99.1*	*99*
Titanium	*1100*	*1111*	*101*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW37A-092616 MS
Lab ID: 240-70005-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-70005-1
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	103		10	U	100	103	75-125		6020
Arsenic	962		1.9	J	1000	96	75-125		6020
Barium	1080		52		1000	103	75-125		6020
Beryllium	1210		5.0	U	1000	121	75-125		6020
Cadmium	955		5.0	U	1000	95	75-125		6020
Chromium	973		10	U	1000	97	75-125		6020
Cobalt	980		5.0	U	1000	98	75-125		6020
Copper	959		3.9	J	1000	96	75-125		6020
Lead	975		5.0	U	1000	98	75-125		6020
Molybdenum	112		3.0	J	100	109	75-125		6020
Nickel	940		2.1	J	1000	94	75-125		6020
Selenium	953		25	U	1000	95	75-125		6020
Silver	96.5		5.0	U	100	97	75-125		6020
Thallium	236		5.0	U	250	94	75-125		6020
Vanadium	990		25	U	1000	99	75-125		6020
Zinc	942		100	U	1000	94	75-125		6020
Calcium	92700		81000		10000	119	75-125	4	6020
Magnesium	256000		250000		10000	107	75-125	4	6020
Tungsten	97.3		50	U	100	97	75-125		6020
Mercury	1.14		0.20	U	1.00	114	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 SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: Lab ID: 240-69995-C-1-B MS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

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	91.0		1.1	J	100	90	75-125		6020
Arsenic	920		3.3	J	1000	92	75-125		6020
Barium	1050		160		1000	89	75-125		6020
Beryllium	1240		1.0	U	1000	124	75-125		6020
Cadmium	871		0.37	J	1000	87	75-125		6020
Chromium	890		1.2	J	1000	89	75-125		6020
Cobalt	914		0.66	J	1000	91	75-125		6020
Lead	856		4.2		1000	85	75-125		6020
Molybdenum	97.3		6.3	J	100	91	75-125		6020
Nickel	897		4.7		1000	89	75-125		6020
Selenium	928		5.1		1000	92	75-125		6020
Silver	90.5		0.034	J	100	90	75-125		6020
Thallium	222		1.0	U	250	89	75-125		6020
Vanadium	888		0.54	J	1000	89	75-125		6020
Zinc	930		41		1000	89	75-125		6020
Magnesium	13100		4500		10000	85	75-125		6020
Tungsten	86.2		10	U	100	86	75-125		6020

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 240-69995-C-1-E MS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

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
Mercury	1.10		0.20	U	1.00	110	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-SW37A-092616 MSD | Lab ID: 240-70005-1 MSD

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

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	103		100	103	75-125	0	20		6020
Arsenic	970		1000	97	75-125	1	20		6020
Barium	1100		1000	104	75-125	1	20		6020
Beryllium	1230		1000	123	75-125	2	20		6020
Cadmium	963		1000	96	75-125	1	20		6020
Chromium	974		1000	97	75-125	0	20		6020
Cobalt	975		1000	98	75-125	0	20		6020
Copper	970		1000	97	75-125	1	20		6020
Lead	985		1000	98	75-125	1	20		6020
Molybdenum	114		100	111	75-125	1	20		6020
Nickel	947		1000	95	75-125	1	20		6020
Selenium	954		1000	95	75-125	0	20		6020
Silver	97.7		100	98	75-125	1	20		6020
Thallium	237		250	95	75-125	0	20		6020
Vanadium	980		1000	98	75-125	1	20		6020
Zinc	947		1000	95	75-125	1	20		6020
Calcium	92100		10000	113	75-125	1	20	4	6020
Magnesium	258000		10000	127	75-125	1	20	4	6020
Tungsten	95.8		100	96	75-125	2	20		6020
Mercury	1.09		1.00	109	80-120	4	20		7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-69995-C-1-C MSD

Lab Name: TestAmerica Canton Job No.: 240-70005-1

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	101		100	100	75-125	10	20		6020
Arsenic	1010		1000	101	75-125	10	20		6020
Barium	1130		1000	97	75-125	7	20		6020
Beryllium	1100		1000	110	75-125	12	20		6020
Cadmium	956		1000	96	75-125	9	20		6020
Chromium	980		1000	98	75-125	10	20		6020
Cobalt	1010		1000	101	75-125	10	20		6020
Lead	949		1000	94	75-125	10	20		6020
Molybdenum	107		100	101	75-125	10	20		6020
Nickel	987		1000	98	75-125	10	20		6020
Selenium	1010		1000	101	75-125	9	20		6020
Silver	98.2		100	98	75-125	8	20		6020
Thallium	249		250	100	75-125	12	20		6020
Vanadium	974		1000	97	75-125	9	20		6020
Zinc	1010		1000	97	75-125	9	20		6020
Magnesium	14400		10000	99	75-125	10	20		6020
Tungsten	95.9		100	96	75-125	11	20		6020

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-69995-C-1-F MSD

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.07		1.00	107	80-120	3	20		7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-248806/2-A

Lab Name: TestAmerica Canton Job No.: 240-70005-1

Sample Matrix: Water LCS Source: MTICPMSB_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	97.1		97	80	120		6020
Arsenic	1000	977		98	80	120		6020
Barium	1000	973		97	80	120		6020
Beryllium	1000	1120		112	80	120		6020
Cadmium	1000	960		96	80	120		6020
Chromium	1000	973		97	80	120		6020
Cobalt	1000	1020		102	80	120		6020
Lead	1000	949		95	80	120		6020
Molybdenum	100	98.1		98	80	120		6020
Nickel	1000	985		98	80	120		6020
Selenium	1000	1000		100	80	120		6020
Silver	100	98.6		99	80	120		6020
Thallium	250	245		98	80	120		6020
Vanadium	1000	963		96	80	120		6020
Zinc	1000	995		100	80	120		6020
Magnesium	10000	10300		103	80	120		6020
Tungsten	100	91.5		91	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 240-248806/2-A

Lab Name: TestAmerica Canton Job No.: 240-70005-1

Sample Matrix: Water LCS Source: MTICPMSB_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	101		101	80	120		6020
Arsenic	1000	923		92	80	120		6020
Barium	1000	1040		104	80	120		6020
Beryllium	1000	1220		122	80	120	*	6020
Cadmium	1000	1040		104	80	120		6020
Chromium	1000	978		98	80	120		6020
Cobalt	1000	1020		102	80	120		6020
Copper	1000	1020		102	80	120		6020
Lead	1000	1020		102	80	120		6020
Molybdenum	100	98.0		98	80	120		6020
Nickel	1000	1030		103	80	120		6020
Selenium	1000	983		98	80	120		6020
Silver	100	97.0		97	80	120		6020
Thallium	250	245		98	80	120		6020
Vanadium	1000	973		97	80	120		6020
Zinc	1000	1020		102	80	120		6020
Calcium	10000	9560		96	80	120		6020
Magnesium	10000	9690		97	80	120		6020
Tungsten	100	94.9		95	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 240-248800/2-A

Lab Name: TestAmerica Canton Job No.: 240-70005-1

Sample Matrix: Water LCS Source: MTICPMSB_00029

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	106		106	80	120		6020
Arsenic	1000	983		98	80	120		6020
Barium	1000	1090		109	80	120		6020
Beryllium	1000	1300		130	80	120	*	6020
Cadmium	1000	1100		110	80	120		6020
Chromium	1000	1040		104	80	120		6020
Cobalt	1000	1080		108	80	120		6020
Copper	1000	1080		108	80	120		6020
Lead	1000	1080		108	80	120		6020
Molybdenum	100	103		103	80	120		6020
Nickel	1000	1100		110	80	120		6020
Selenium	1000	1040		104	80	120		6020
Silver	100	101		101	80	120		6020
Thallium	250	261		104	80	120		6020
Vanadium	1000	1030		103	80	120		6020
Zinc	1000	1080		108	80	120		6020
Calcium	10000	10100		101	80	120		6020
Magnesium	10000	10300		103	80	120		6020
Tungsten	100	101		101	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

Lab ID: LCS 240-248812/2-A

Lab Name: TestAmerica Canton Job No.: 240-70005-1

Sample Matrix: Water LCS Source: MTHGCALW_01322

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.19		104	80	120		7470A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-248805/2-A

Lab Name: TestAmerica Canton Job No.: 240-70005-1

Sample Matrix: Water LCS Source: MTHGCALW_01322

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.00		100	80	120		7470A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-70005-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-70005-1

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	1.9	J	130	U	NC		6020
Barium	52		52.2	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	3.9	J	50	U	NC		6020
Lead	5.0	U	25	U	NC		6020
Molybdenum	3.0	J	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	81000		86200		NC		6020
Magnesium	250000		259000		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

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-69995-C-1-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-70005-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	1.1	J	10	U	NC		6020
Arsenic	3.3	J	3.37	J	NC		6020
Barium	160		159		NC		6020
Beryllium	1.0	U	5.0	U	NC		6020
Cadmium	0.37	J	5.0	U	NC		6020
Chromium	1.2	J	10	U	NC		6020
Cobalt	0.66	J	5.0	U	NC		6020
Lead	4.2		4.17	J	NC		6020
Molybdenum	6.3	J	5.96	J	NC		6020
Nickel	4.7		3.98	J	NC		6020
Selenium	5.1		8.24	J	NC		6020
Silver	0.034	J	5.0	U	NC		6020
Thallium	1.0	U	5.0	U	NC		6020
Vanadium	0.54	J	25	U	NC		6020
Zinc	41		45.4	J	NC		6020
Magnesium	4500		4510	J	NC		6020
Tungsten	10	U	50	U	NC		6020

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

FORM VIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/07/2016 End Date: 10/07/2016

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 240-250567/2	10:33	100		100		100		100		100	
STD1 240-250567/3 I	10:37	97		100		99		97		98	
STD2 240-250567/4 I	10:41	97		103		99		96		98	
STD3 240-250567/5 I	10:45	92		98		96		90		92	
STD4 240-250567/6 I	10:50	94		98		96		96		94	
ICV 240-250567/7	10:54	96		98		101		93		94	
ICB 240-250567/8	10:58	103		102		104		104		103	
CRI 240-250567/9	11:02	103		104		105		102		102	
ICSA 240-250567/10	11:06	89		96		92		90		91	
ICSAB 240-250567/11	11:10	87		93		94		90		90	
CCV 240-250567/118	18:44	71		34		78		54		35	
CCB 240-250567/119	18:49	73		33		79		56		36	
MB 240-248806/1-A	18:53	60		30		72		51		33	
LCS 240-248806/2-A	18:57	59				70		48		31	
240-69995-C-1-A SD	19:05	69		32		79		54		35	
240-69995-C-1-A PDS	19:09	60				72		47		30	
240-69995-C-1-B MS	19:13	60				72		48		30	
240-69995-C-1-C MSD	19:17	59				72		48		30	
240-70005-21	19:29	90		38		103		58		37	
CCV 240-250567/130	19:34	81		38		92		60		39	
CCB 240-250567/131	19:38	80		36		91		61		39	
240-70005-22	19:42	88		37		101		56		36	
240-70005-23	19:46	89		38		101		56		36	
240-70005-24	19:50	87		37		97		55		35	
240-70005-25	19:54	92		38		103		56		37	
240-70005-26	19:59	90		37		99		54		35	
240-70005-27	20:03	87		36		98		54		35	
240-70005-28	20:07	87		37		98		54		35	
240-70005-29	20:11	90		38		100		56		37	
240-70005-30	20:15	85		37		95		54		35	
240-70005-31	20:19	84		36		93		53		35	
CCV 240-250567/142	20:24	70		34		79		53		35	
CCB 240-250567/143	20:28	76		34		82		57		37	
240-70005-32	20:32	85		35		98		52		35	
240-70005-33	20:36	90		37		101		55		36	
240-70005-34	20:40	89		38		100		56		36	
240-70005-35	20:44	90		39		100		57		37	
240-70005-36	20:49	84		37		95		55		36	
MB 240-248800/1-A	20:53	71		33		82		55		35	
LCS 240-248800/2-A	20:57	59				70		47		30	
240-70005-1	21:01	79		33		91		51		33	
240-70005-1 SD	21:05	79		36		87		58		37	

No sample results reported from 10-7-16 analysis

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/07/2016 End Date: 10/07/2016

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
240-70005-1 PDS	21:09	65		31		76		46		30	
CCV 240-250567/154	21:13	71		32		80		50		33	
CCB 240-250567/155	21:17	69		31		78		54		35	
240-70005-1 MS	21:22	71		32		82		49		32	
240-70005-1 MSD	21:26	73		32		83		49		32	
240-70005-2	21:30	79		33		89		50		33	
240-70005-3	21:34	82		36		94		54		35	
240-70005-4	21:38	84		37		97		55		36	
240-70005-5	21:42	85		38		97		57		37	
240-70005-6	21:46	82		37		95		55		36	
240-70005-7	21:51	87		37		101		56		37	
ICSA 240-250567/164	21:55	72		34		81		54		36	
ICSAB 240-250567/16	21:59	66		32		78		52		35	
CCV 240-250567/166	22:03	68		34		80		54		36	
CCB 240-250567/167	22:07	70		33		81		57		37	
240-70005-8	22:11	80		35		94		53		35	
240-70005-9	22:15	82		37		97		57		37	
240-70005-10	22:20	84		36		97		54		36	
240-70005-11	22:24	81		36		94		54		35	
240-70005-12	22:28	84		37		98		54		36	
240-70005-13	22:32	86		38		99		57		37	
240-70005-14	22:36	83		37		96		56		36	
240-70005-15	22:40	84		36		97		55		36	
240-70005-16	22:45	86		37		99		56		37	
240-70005-17	22:49	87		38		102		57		37	
CCV 240-250567/178	22:53	72		36		83		56		37	
CCB 240-250567/179	22:57	72		35		81		58		39	
240-70005-18	23:01	84		36		97		55		36	
240-70005-19	23:05	87		39		101		58		39	
240-70005-20	23:10	84		38		98		56		37	
CCV 240-250567/183	23:14	72		36		83		55		37	
CCB 240-250567/184	23:18	75		35		84		58		38	

No sample results reported from 10-7-16 analysis

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/07/2016 End Date: 10/07/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-250567/2	10:33	100		100		100					
STD1 240-250567/3 I	10:37	98		99		99					
STD2 240-250567/4 I	10:41	99		99		96					
STD3 240-250567/5 I	10:45	94		95		90					
STD4 240-250567/6 I	10:50	95		96		95					
ICV 240-250567/7	10:54	96		97		95					
ICB 240-250567/8	10:58	103		102		103					
CRI 240-250567/9	11:02	103		101		102					
ICSA 240-250567/10	11:06	93		93		95					
ICSAB 240-250567/11	11:10	93		93		96					
CCV 240-250567/118	18:44	56		57		55					
CCB 240-250567/119	18:49	59		59		59					
MB 240-248806/1-A	18:53	54		55		63					
LCS 240-248806/2-A	18:57	53		54		58					
240-69995-C-1-A SD	19:05	57		58		61					
240-69995-C-1-A PDS	19:09	53		53		56					
240-69995-C-1-B MS	19:13	52		54		56					
240-69995-C-1-C MSD	19:17	52		54		56					
240-70005-21	19:29	61		62		58					
CCV 240-250567/130	19:34	62		64		61					
CCB 240-250567/131	19:38	60		61		62					
240-70005-22	19:42	60		61		56					
240-70005-23	19:46	59		60		56					
240-70005-24	19:50	57		59		54					
240-70005-25	19:54	58		60		55					
240-70005-26	19:59	56		57		53					
240-70005-27	20:03	56		57		53					
240-70005-28	20:07	57		57		53					
240-70005-29	20:11	59		60		55					
240-70005-30	20:15	56		57		53					
240-70005-31	20:19	55		57		52					
CCV 240-250567/142	20:24	57		57		55					
CCB 240-250567/143	20:28	58		59		59					
240-70005-32	20:32	57		58		54					
240-70005-33	20:36	58		58		53					
240-70005-34	20:40	58		59		55					
240-70005-35	20:44	60		61		56					
240-70005-36	20:49	57		58		54					
MB 240-248800/1-A	20:53	55		56		61					
LCS 240-248800/2-A	20:57	51		52		54					
240-70005-1	21:01	55		55		52					
240-70005-1 SD	21:05	59		61		59					

No sample results reported from 10-7-16 analysis

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/07/2016 End Date: 10/07/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-70005-1 PDS	21:09	50		52		48					
CCV 240-250567/154	21:13	53		55		53					
CCB 240-250567/155	21:17	56		56		56					
240-70005-1 MS	21:22	53		54		50					
240-70005-1 MSD	21:26	53		55		50					
240-70005-2	21:30	54		56		52					
240-70005-3	21:34	58		58		54					
240-70005-4	21:38	58		60		56					
240-70005-5	21:42	60		61		57					
240-70005-6	21:46	59		60		56					
240-70005-7	21:51	59		60		56					
ICSA 240-250567/164	21:55	56		57		59					
ICSAB 240-250567/16	21:59	55		55		57					
CCV 240-250567/166	22:03	58		59		58					
CCB 240-250567/167	22:07	58		59		60					
240-70005-8	22:11	57		59		55					
240-70005-9	22:15	60		62		57					
240-70005-10	22:20	58		59		55					
240-70005-11	22:24	58		58		54					
240-70005-12	22:28	58		59		54					
240-70005-13	22:32	60		62		56					
240-70005-14	22:36	58		60		55					
240-70005-15	22:40	58		59		55					
240-70005-16	22:45	59		60		56					
240-70005-17	22:49	61		61		57					
CCV 240-250567/178	22:53	60		61		58					
CCB 240-250567/179	22:57	60		61		62					
240-70005-18	23:01	60		61		57					
240-70005-19	23:05	62		63		60					
240-70005-20	23:10	60		61		57					
CCV 240-250567/183	23:14	59		59		58					
CCB 240-250567/184	23:18	60		60		61					

No sample results reported from 10-7-16 analysis

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/11/2016 End Date: 10/12/2016

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 240-250950/2	19:13	100		100		100		100		100	
STD1 240-250950/3 I	19:18	99		97		101		94		95	
STD2 240-250950/4 I	19:22	96		96		96		90		91	
STD3 240-250950/5 I	19:26	99		97		99		90		90	
STD4 240-250950/6 I	19:31	97		92		96		91		90	
ICV 240-250950/7	19:35	94		93		92		86		90	
ICB 240-250950/8	19:39	99		93		93		93		94	
CRI 240-250950/9	19:44	98		90		92		87		88	
ICSA 240-250950/10	19:48	98		93		99		85		88	
ICSAB 240-250950/11	19:52	94		96		95		91		92	
CCV 240-250950/35	21:35	107		99		101		93		95	
CCB 240-250950/36	21:39	115		97		111		96		97	
MB 240-248806/1-A	21:43	110		91		96		91		89	
LCS 240-248806/2-A	21:48	102		89		92		88		88	
240-69995-C-1-A SD	21:56	107		96		101		95		95	
240-69995-C-1-B MS	22:04	94		100		84		96		96	
240-69995-C-1-C MSD	22:08	101		91		95		88		87	
240-70005-21	22:21	115		114		112		94		100	
CCV 240-250950/47	22:25	112		112		110		101		105	
CCB 240-250950/48	22:29	112		110		105		104		106	
240-70005-22	22:34	106		108		102		90		96	
240-70005-23	22:38	110		111		108		90		96	
240-70005-24	22:42	112		113		110		90		98	
240-70005-25	22:47	115		119		114		93		101	
240-70005-26	22:51	119				117		97		106	
240-70005-27	22:55	107				106		96		104	
240-70005-28	23:00	116				115		96		104	
240-70005-29	23:04	120						99		106	
240-70005-30	23:08	117				120		99		108	
240-70005-31	23:13					120		100		108	
CCV 240-250950/59	23:17	111				114		111		116	
CCB 240-250950/60	23:21	112		115		110		108		111	
240-70005-32	23:26	111		116		115		95		103	
240-70005-33	23:30	112				110		97		105	
240-70005-34	23:34	120						100		109	
240-70005-35	23:39	116				116		106		116	
240-70005-36	23:43	118				119		99		108	
MB 240-248800/1-A	23:48			115		111		104		106	
LCS 240-248800/2-A	23:52	103		101		99		97		96	
240-70005-1	23:56	109		115		115		98		103	
240-70005-1 SD	00:00	114		120		114		106		111	
CCV 240-250950/71	00:09	107		113		107		102		105	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/11/2016 End Date: 10/12/2016

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
CCB 240-250950/72	00:13	110		111		105		108		110	
240-70005-1 MS	00:17	105		110		109		94		102	
240-70005-1 MSD	00:21	107		119		115		97		104	
240-70005-2	00:26	114				117		100		109	
240-70005-3	00:30	114		120		116		97		105	
240-70005-4	00:34	113				114		97		106	
240-70005-5	00:39	114				115		98		105	
240-70005-6	00:43	112				116		96		104	
240-70005-7	00:47	118						100		108	
CCV 240-250950/83	01:00	104		98		107		91		96	
CCB 240-250950/84	01:04	111		109		109		107		107	
240-70005-8	01:09	107		113		109		96		104	
240-70005-9	01:13	110		116		111		96		103	
240-70005-10	01:17	110		116		113		95		103	
240-70005-11	01:22	114		118		116		95		103	
240-70005-12	01:26	116				116		99		107	
240-70005-13	01:30	116				117		99		106	
240-70005-14	01:35	120						99		109	
240-70005-15	01:39	112				116		98		107	
240-70005-16	01:44	116						100		109	
CCV 240-250950/95	01:52	108		113		109		103		108	
CCB 240-250950/96	01:56	111		109		104		104		107	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/11/2016 End Date: 10/12/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-250950/2	19:13	100		100		100					
STD1 240-250950/3 I	19:18	95		96		95					
STD2 240-250950/4 I	19:22	94		93		91					
STD3 240-250950/5 I	19:26	94		93		89					
STD4 240-250950/6 I	19:31	92		91		93					
ICV 240-250950/7	19:35	91		90		89					
ICB 240-250950/8	19:39	94		93		94					
CRI 240-250950/9	19:44	90		89		90					
ICSA 240-250950/10	19:48	91		91		87					
ICSAB 240-250950/11	19:52	94		94		90					
CCV 240-250950/35	21:35	98		99		94					
CCB 240-250950/36	21:39	97		97		97					
MB 240-248806/1-A	21:43	92		91		95					
LCS 240-248806/2-A	21:48	92		92		90					
240-69995-C-1-A SD	21:56	97		98		97					
240-69995-C-1-B MS	22:04	102		103		96					
240-69995-C-1-C MSD	22:08	93		93		90					
240-70005-21	22:21	100		100		88					
CCV 240-250950/47	22:25	105		104		100					
CCB 240-250950/48	22:29	105		106		105					
240-70005-22	22:34	97		96		85					
240-70005-23	22:38	96		95		84					
240-70005-24	22:42	95		94		83					
240-70005-25	22:47	97		97		84					
240-70005-26	22:51	103		103		89					
240-70005-27	22:55	101		101		88					
240-70005-28	23:00	102		101		87					
240-70005-29	23:04	102		102		88					
240-70005-30	23:08	103		103		89					
240-70005-31	23:13	105		105		90					
CCV 240-250950/59	23:17	114		114		106					
CCB 240-250950/60	23:21	110		108		106					
240-70005-32	23:26	100		99		89					
240-70005-33	23:30	101		101		88					
240-70005-34	23:34	106		104		90					
240-70005-35	23:39	110		111		95					
240-70005-36	23:43	103		103		89					
MB 240-248800/1-A	23:48	103		102		101					
LCS 240-248800/2-A	23:52	98		98		95					
240-70005-1	23:56	103		103		91					
240-70005-1 SD	00:00	109		110		102					
CCV 240-250950/71	00:09	104		105		99					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/11/2016 End Date: 10/12/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
CCB 240-250950/72	00:13	109		109		108					
240-70005-1 MS	00:17	102		102		90					
240-70005-1 MSD	00:21	105		104		91					
240-70005-2	00:26	106		106		93					
240-70005-3	00:30	103		103		91					
240-70005-4	00:34	103		103		90					
240-70005-5	00:39	103		102		89					
240-70005-6	00:43	101		101		89					
240-70005-7	00:47	103		104		90					
CCV 240-250950/83	01:00	96		95		91					
CCB 240-250950/84	01:04	108		108		107					
240-70005-8	01:09	103		104		92					
240-70005-9	01:13	102		103		91					
240-70005-10	01:17	100		101		89					
240-70005-11	01:22	100		101		88					
240-70005-12	01:26	104		103		90					
240-70005-13	01:30	103		105		91					
240-70005-14	01:35	104		104		91					
240-70005-15	01:39	103		101		89					
240-70005-16	01:44	105		104		90					
CCV 240-250950/95	01:52	108		107		102					
CCB 240-250950/96	01:56	105		106		105					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/13/2016 End Date: 10/13/2016

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 240-251370/2	13:04	100		100		100		100		100	
STD1 240-251370/3 I	13:08	102		102		100		99		100	
STD2 240-251370/4 I	13:13	100		102		102		96		96	
STD3 240-251370/5 I	13:17	99		100		100		92		94	
STD4 240-251370/6 I	13:21	98		101		100		99		99	
ICV 240-251370/7	13:25	100		100		101		95		96	
ICB 240-251370/8	13:30	104		103		103		101		102	
CRI 240-251370/9	13:34	102		103		101		99		100	
ICSA 240-251370/10	13:38	96		96		97		89		92	
ICSAB 240-251370/11	13:43	93		96		95		88		94	
CCV 240-251370/77	18:25	80		79		79		77		80	
CCB 240-251370/78	18:29	81		77		79		78		82	
MB 240-248806/1-A	18:33	82		75		77		77		79	
LCS 240-248806/2-A	18:38	80		75		76		75		76	
240-70005-21	18:42	83		78		85		70		77	
240-70005-22	18:46	83		79		83		70		77	
240-70005-23	18:50	85		84		85		73		81	
240-70005-24	18:55	82		84		83		74		80	
240-70005-25	18:59	84		81		86		70		78	
240-70005-26	19:03	86		80		87		71		79	
240-70005-27	19:08	87		84		85		73		82	
240-70005-28	19:12	88		84		85		73		81	
CCV 240-251370/89	19:16	84		83		83		80		84	
CCB 240-251370/90	19:21	85		83		84		84		87	
240-70005-29	19:25	87		88		88		77		85	
240-70005-30	19:29	88		89		88		77		84	
240-70005-31	19:34	86		89		86		77		84	
240-70005-32	19:38	88		90		90		78		87	
240-70005-33	19:42	90		93		91		79		88	
240-70005-34	19:47	90		91		90		79		89	
240-70005-35	19:51	88		91		90		79		85	
240-70005-36	19:55	87		92		90		80		86	
MB 240-248800/1-A	20:00	93		90		88		88		92	
LCS 240-248800/2-A	20:04	82		78		81		78		79	
CCV 240-251370/101	20:08	85		83		84		79		84	
CCB 240-251370/102	20:12	85		85		82		85		89	
240-70005-1	20:17	87		89		88		78		84	
240-70005-1 SD	20:21	92		90		90		83		89	
240-70005-1 PDS	20:25	80		83		82		74		79	
240-70005-1 MS	20:29	86		88		86		78		84	
240-70005-1 MSD	20:34	87		90		86		80		86	
240-70005-2	20:38	89		89		90		79		85	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/13/2016 End Date: 10/13/2016

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
240-70005-3	20:42	87		91		85		79		89	
240-70005-4	20:47	92		89		95		79		85	
240-70005-5	20:51	93		91		93		79		88	
240-70005-6	20:55	91		93		93		81		89	
CCV 240-251370/113	20:59	91		90		90		85		91	
CCB 240-251370/114	21:04	92		90		88		89		94	
240-70005-7	21:08	89		91		88		80		89	
240-70005-8	21:12	92		92		94		81		89	
240-70005-9	21:17	92		95		95		82		92	
240-70005-10	21:21	93		96		93		83		92	
240-70005-11	21:25	93		94		96		82		89	
240-70005-12	21:30	95		93		97		81		90	
240-70005-13	21:34	94		96		97		83		91	
240-70005-14	21:38	93		93		93		81		90	
240-70005-15	21:42	92		96		95		84		92	
240-70005-16	21:47	91		99		91		86		95	
CCV 240-251370/125	21:51	91		90		90		86		92	
CCB 240-251370/126	21:55	94		91		91		91		93	
240-70005-17	22:00	93		94		93		82		91	
240-70005-18	22:04	94		96		94		84		93	
240-70005-19	22:08	94		96		96		84		91	
240-70005-20	22:13	93		96		96		83		92	
CCV 240-251370/131	22:17	94		94		91		89		94	
CCB 240-251370/132	22:21	96		92		92		92		94	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/13/2016 End Date: 10/13/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-251370/2	13:04	100		100		100					
STD1 240-251370/3 I	13:08	101		101		101					
STD2 240-251370/4 I	13:13	101		101		98					
STD3 240-251370/5 I	13:17	99		99		93					
STD4 240-251370/6 I	13:21	100		100		100					
ICV 240-251370/7	13:25	99		99		96					
ICB 240-251370/8	13:30	103		102		101					
CRI 240-251370/9	13:34	102		101		101					
ICSA 240-251370/10	13:38	96		96		91					
ICSAB 240-251370/11	13:43	96		94		91					
CCV 240-251370/77	18:25	86		86		84					
CCB 240-251370/78	18:29	86		87		87					
MB 240-248806/1-A	18:33	84		85		86					
LCS 240-248806/2-A	18:38	84		85		83					
240-70005-21	18:42	82		83		77					
240-70005-22	18:46	82		82		75					
240-70005-23	18:50	86		86		78					
240-70005-24	18:55	86		86		77					
240-70005-25	18:59	82		81		75					
240-70005-26	19:03	82		82		76					
240-70005-27	19:08	85		85		78					
240-70005-28	19:12	85		84		76					
CCV 240-251370/89	19:16	90		90		87					
CCB 240-251370/90	19:21	91		89		92					
240-70005-29	19:25	89		89		82					
240-70005-30	19:29	90		90		81					
240-70005-31	19:34	88		90		79					
240-70005-32	19:38	90		90		82					
240-70005-33	19:42	92		91		82					
240-70005-34	19:47	90		91		81					
240-70005-35	19:51	90		91		81					
240-70005-36	19:55	90		90		80					
MB 240-248800/1-A	20:00	92		93		93					
LCS 240-248800/2-A	20:04	86		86		85					
CCV 240-251370/101	20:08	88		89		87					
CCB 240-251370/102	20:12	91		90		92					
240-70005-1	20:17	89		90		82					
240-70005-1 SD	20:21	93		93		89					
240-70005-1 PDS	20:25	85		86		78					
240-70005-1 MS	20:29	89		90		80					
240-70005-1 MSD	20:34	92		92		82					
240-70005-2	20:38	90		89		81					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 10/13/2016 End Date: 10/13/2016

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-70005-3	20:42	91		91		81					
240-70005-4	20:47	88		88		80					
240-70005-5	20:51	92		91		83					
240-70005-6	20:55	92		91		82					
CCV 240-251370/113	20:59	93		94		90					
CCB 240-251370/114	21:04	94		95		94					
240-70005-7	21:08	90		91		83					
240-70005-8	21:12	93		92		83					
240-70005-9	21:17	94		93		84					
240-70005-10	21:21	94		94		84					
240-70005-11	21:25	92		92		83					
240-70005-12	21:30	92		92		83					
240-70005-13	21:34	93		95		84					
240-70005-14	21:38	92		92		82					
240-70005-15	21:42	94		94		84					
240-70005-16	21:47	96		96		86					
CCV 240-251370/125	21:51	94		95		90					
CCB 240-251370/126	21:55	96		95		95					
240-70005-17	22:00	94		93		83					
240-70005-18	22:04	95		95		85					
240-70005-19	22:08	94		94		84					
240-70005-20	22:13	94		94		84					
CCV 240-251370/131	22:17	97		97		92					
CCB 240-251370/132	22:21	97		95		96					

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-70005-1

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: 240-70005-1

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: 240-70005-1

SDG Number:

Matrix: Water Instrument ID: H2

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: 240-70005-1

SDG Number:

Matrix: Water Instrument ID: H2

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: 240-70005-1

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: 240-70005-1

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: 240-70005-1

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

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-248800/1-A	09/28/2016 14:00	248800		50	50
LCS 240-248800/2-A	09/28/2016 14:00	248800		50	50
240-70005-1	09/28/2016 14:00	248800		50	50
240-70005-1 MS	09/28/2016 14:00	248800		50	50
240-70005-1 MSD	09/28/2016 14:00	248800		50	50
240-70005-2	09/28/2016 14:00	248800		50	50
240-70005-3	09/28/2016 14:00	248800		50	50
240-70005-4	09/28/2016 14:00	248800		50	50
240-70005-5	09/28/2016 14:00	248800		50	50
240-70005-6	09/28/2016 14:00	248800		50	50
240-70005-7	09/28/2016 14:00	248800		50	50
240-70005-8	09/28/2016 14:00	248800		50	50
240-70005-9	09/28/2016 14:00	248800		50	50
240-70005-10	09/28/2016 14:00	248800		50	50
240-70005-11	09/28/2016 14:00	248800		50	50
240-70005-12	09/28/2016 14:00	248800		50	50
240-70005-13	09/28/2016 14:00	248800		50	50
240-70005-14	09/28/2016 14:00	248800		50	50
240-70005-15	09/28/2016 14:00	248800		50	50
240-70005-16	09/28/2016 14:00	248800		50	50
240-70005-17	09/28/2016 14:00	248800		50	50
240-70005-18	09/28/2016 14:00	248800		50	50
240-70005-19	09/28/2016 14:00	248800		50	50
240-70005-20	09/28/2016 14:00	248800		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-248806/1-A	09/28/2016 14:00	248806		50	50
LCS 240-248806/2-A	09/28/2016 14:00	248806		50	50
240-69995-C-1-B MS	09/28/2016 14:00	248806		50	50
240-69995-C-1-C MSD	09/28/2016 14:00	248806		50	50
240-70005-21	09/28/2016 14:00	248806		50	50
240-70005-22	09/28/2016 14:00	248806		50	50
240-70005-23	09/28/2016 14:00	248806		50	50
240-70005-24	09/28/2016 14:00	248806		50	50
240-70005-25	09/28/2016 14:00	248806		50	50
240-70005-26	09/28/2016 14:00	248806		50	50
240-70005-27	09/28/2016 14:00	248806		50	50
240-70005-28	09/28/2016 14:00	248806		50	50
240-70005-29	09/28/2016 14:00	248806		50	50
240-70005-30	09/28/2016 14:00	248806		50	50
240-70005-31	09/28/2016 14:00	248806		50	50
240-70005-32	09/28/2016 14:00	248806		50	50
240-70005-33	09/28/2016 14:00	248806		50	50
240-70005-34	09/28/2016 14:00	248806		50	50
240-70005-35	09/28/2016 14:00	248806		50	50
240-70005-36	09/28/2016 14:00	248806		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-248805/1-A	09/28/2016 14:00	248805		50	50
LCS 240-248805/2-A	09/28/2016 14:00	248805		50	50
240-70005-1	09/28/2016 14:00	248805		50	50
240-70005-1 MS	09/28/2016 14:00	248805		50	50
240-70005-1 MSD	09/28/2016 14:00	248805		50	50
240-70005-2	09/28/2016 14:00	248805		50	50
240-70005-3	09/28/2016 14:00	248805		50	50
240-70005-4	09/28/2016 14:00	248805		50	50
240-70005-5	09/28/2016 14:00	248805		50	50
240-70005-6	09/28/2016 14:00	248805		50	50
240-70005-7	09/28/2016 14:00	248805		50	50
240-70005-8	09/28/2016 14:00	248805		50	50
240-70005-9	09/28/2016 14:00	248805		50	50
240-70005-10	09/28/2016 14:00	248805		50	50
240-70005-11	09/28/2016 14:00	248805		50	50
240-70005-12	09/28/2016 14:00	248805		50	50
240-70005-13	09/28/2016 14:00	248805		50	50
240-70005-14	09/28/2016 14:00	248805		50	50
240-70005-15	09/28/2016 14:00	248805		50	50
240-70005-16	09/28/2016 14:00	248805		50	50
240-70005-17	09/28/2016 14:00	248805		50	50
240-70005-18	09/28/2016 14:00	248805		50	50
240-70005-19	09/28/2016 14:00	248805		50	50
240-70005-20	09/28/2016 14:00	248805		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-248812/1-A	09/28/2016 14:00	248812		50	50
LCS 240-248812/2-A	09/28/2016 14:00	248812		50	50
240-69995-C-1-E MS	09/28/2016 14:00	248812		50	50
240-69995-C-1-F MSD	09/28/2016 14:00	248812		50	50
240-70005-21	09/28/2016 14:00	248812		50	50
240-70005-22	09/28/2016 14:00	248812		50	50
240-70005-23	09/28/2016 14:00	248812		50	50
240-70005-24	09/28/2016 14:00	248812		50	50
240-70005-25	09/28/2016 14:00	248812		50	50
240-70005-26	09/28/2016 14:00	248812		50	50
240-70005-27	09/28/2016 14:00	248812		50	50
240-70005-28	09/28/2016 14:00	248812		50	50
240-70005-29	09/28/2016 14:00	248812		50	50
240-70005-30	09/28/2016 14:00	248812		50	50
240-70005-31	09/28/2016 14:00	248812		50	50
240-70005-32	09/28/2016 14:00	248812		50	50
240-70005-33	09/28/2016 14:00	248812		50	50
240-70005-34	09/28/2016 14:00	248812		50	50
240-70005-35	09/28/2016 14:00	248812		50	50
240-70005-36	09/28/2016 14:00	248812		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/07/2016 10:29 End Date: 10/07/2016 23:18

Lab Sample ID	D / F	Type	Time	Analytes																			
ZZZZZZ			10:29																				
ICIS 240-250567/2	1		10:33																				
STD1 240-250567/3 IC	1		10:37																				
STD2 240-250567/4 IC	1		10:41																				
STD3 240-250567/5 IC	1		10:45																				
STD4 240-250567/6 IC	1		10:50																				
ICV 240-250567/7	1		10:54																				
ICB 240-250567/8	1		10:58																				
CRI 240-250567/9	1		11:02																				
ICSA 240-250567/10	1		11:06																				
ICSAB 240-250567/11	1		11:10																				
CCV 240-250567/12			11:14																				
CCB 240-250567/13			11:18																				
CCV 240-250567/14			11:36																				
CCB 240-250567/15			11:40																				
ZZZZZZ			11:44																				
ZZZZZZ			11:48																				
ZZZZZZ			11:53																				
ZZZZZZ			11:57																				
ZZZZZZ			12:01																				
ZZZZZZ			12:06																				
CCV 240-250567/22			12:09																				
CCB 240-250567/23			12:13																				
ZZZZZZ			12:18																				
ZZZZZZ			12:23																				
ZZZZZZ			12:27																				
ZZZZZZ			12:32																				
ZZZZZZ			12:36																				
ZZZZZZ			12:40																				
ZZZZZZ			12:44																				
ZZZZZZ			12:48																				
CCV 240-250567/32			12:52																				
CCB 240-250567/33			12:56																				
ZZZZZZ			13:01																				
ZZZZZZ			13:05																				
ZZZZZZ			13:09																				
ZZZZZZ			13:13																				
ZZZZZZ			13:17																				
ZZZZZZ			13:21																				
ZZZZZZ			13:25																				
ZZZZZZ			13:29																				
ZZZZZZ			13:33																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/07/2016 10:29 End Date: 10/07/2016 23:18

Lab Sample ID	D / F	Type	Time	Analytes																			
ZZZZZZ			13:38																				
CCV 240-250567/44			13:42																				
CCB 240-250567/45			13:46																				
ZZZZZZ			13:50																				
ZZZZZZ			13:54																				
ZZZZZZ			13:58																				
ZZZZZZ			14:02																				
ZZZZZZ			14:06																				
ZZZZZZ			14:10																				
ZZZZZZ			14:14																				
ZZZZZZ			14:18																				
ZZZZZZ			14:23																				
ZZZZZZ			14:27																				
CCV 240-250567/56			14:30																				
CCB 240-250567/57			14:35																				
ZZZZZZ			14:39																				
ZZZZZZ			14:43																				
ZZZZZZ			14:47																				
CCV 240-250567/61			14:52																				
CCB 240-250567/62			14:56																				
ZZZZZZ			15:00																				
ZZZZZZ			15:04																				
ZZZZZZ			15:08																				
ZZZZZZ			15:12																				
ZZZZZZ			15:17																				
ZZZZZZ			15:21																				
ZZZZZZ			15:24																				
ZZZZZZ			15:28																				
ZZZZZZ			15:32																				
CCV 240-250567/72			15:36																				
CCB 240-250567/73			15:40																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:01																				
ZZZZZZ			16:05																				
ZZZZZZ			16:09																				
ZZZZZZ			16:13																				
ZZZZZZ			16:17																				
CCV 240-250567/83			16:21																				
CCB 240-250567/84			16:25																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/07/2016 10:29 End Date: 10/07/2016 23:18

Lab Sample ID	D / F	Type	Time	Analytes																			
CRI 240-250567/85			16:30																				
ZZZZZZ			16:34																				
ZZZZZZ			16:38																				
ZZZZZZ			16:42																				
ZZZZZZ			16:46																				
ZZZZZZ			16:50																				
ZZZZZZ			16:54																				
ZZZZZZ			16:58																				
ZZZZZZ			17:02																				
ZZZZZZ			17:06																				
CCV 240-250567/95			17:10																				
CCB 240-250567/96			17:14																				
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				
ZZZZZZ			17:27																				
ZZZZZZ			17:31																				
CCV 240-250567/101			17:35																				
CCB 240-250567/102			17:39																				
CRI 240-250567/103			17:43																				
ZZZZZZ			17:47																				
ZZZZZZ			17:52																				
ZZZZZZ			17:55																				
ZZZZZZ			18:00																				
ZZZZZZ			18:04																				
ZZZZZZ			18:08																				
ZZZZZZ			18:12																				
CCV 240-250567/111			18:16																				
CCB 240-250567/112			18:20																				
ZZZZZZ			18:24																				
ZZZZZZ			18:28																				
ZZZZZZ			18:32																				
ZZZZZZ			18:36																				
ZZZZZZ			18:40																				
CCV 240-250567/118	1		18:44																				
CCB 240-250567/119	1		18:49																				
ZZZZZZ			18:53																				
ZZZZZZ			18:57																				
ZZZZZZ			19:01																				
ZZZZZZ			19:05																				
ZZZZZZ			19:09																				
ZZZZZZ			19:13																				
ZZZZZZ			19:17																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/07/2016 10:29 End Date: 10/07/2016 23:18

Lab Sample ID	D / F	Type	Time	Analytes																			
ZZZZZZ			19:21																				
ZZZZZZ			19:25																				
ZZZZZZ			19:29																				
CCV 240-250567/130	1		19:34																				
CCB 240-250567/131	1		19:38																				
ZZZZZZ			19:42																				
ZZZZZZ			19:46																				
ZZZZZZ			19:50																				
ZZZZZZ			19:54																				
ZZZZZZ			19:59																				
ZZZZZZ			20:03																				
ZZZZZZ			20:07																				
ZZZZZZ			20:11																				
ZZZZZZ			20:15																				
ZZZZZZ			20:19																				
CCV 240-250567/142	1		20:24																				
CCB 240-250567/143	1		20:28																				
ZZZZZZ			20:32																				
ZZZZZZ			20:36																				
ZZZZZZ			20:40																				
ZZZZZZ			20:44																				
ZZZZZZ			20:49																				
ZZZZZZ			20:53																				
ZZZZZZ			20:57																				
ZZZZZZ			21:01																				
ZZZZZZ			21:05																				
ZZZZZZ			21:09																				
CCV 240-250567/154	1		21:13																				
CCB 240-250567/155	1		21:17																				
ZZZZZZ			21:22																				
ZZZZZZ			21:26																				
ZZZZZZ			21:30																				
ZZZZZZ			21:34																				
ZZZZZZ			21:38																				
ZZZZZZ			21:42																				
ZZZZZZ			21:46																				
ZZZZZZ			21:51																				
ICSA 240-250567/164	1		21:55																				
ICSAB 240-250567/165	1		21:59																				
CCV 240-250567/166	1		22:03																				
CCB 240-250567/167	1		22:07																				
ZZZZZZ			22:11																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/07/2016 10:29 End Date: 10/07/2016 23:18

Lab Sample ID	D / F	Type	Time	Analytes																			
ZZZZZZ			22:15																				
ZZZZZZ			22:20																				
ZZZZZZ			22:24																				
ZZZZZZ			22:28																				
ZZZZZZ			22:32																				
ZZZZZZ			22:36																				
ZZZZZZ			22:40																				
ZZZZZZ			22:45																				
ZZZZZZ			22:49																				
CCV 240-250567/178	1		22:53																				
CCB 240-250567/179	1		22:57																				
ZZZZZZ			23:01																				
ZZZZZZ			23:05																				
ZZZZZZ			23:10																				
CCV 240-250567/183	1		23:14																				
CCB 240-250567/184	1		23:18																				

Prep Types

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/11/2016 19:09 End Date: 10/12/2016 06:41

Lab Sample ID	D/F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			19:09																			
ICIS 240-250950/2	1		19:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD1 240-250950/3 IC	1		19:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD2 240-250950/4 IC	1		19:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD3 240-250950/5 IC	1		19:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD4 240-250950/6 IC	1		19:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV 240-250950/7	1		19:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB 240-250950/8	1		19:39	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
CRI 240-250950/9	1		19:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA 240-250950/10	1		19:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB 240-250950/11	1		19:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-250950/12			19:56																			
CCB 240-250950/13			20:01																			
CCV 240-250950/14			20:05																			
CCB 240-250950/15			20:09																			
ZZZZZZ			20:14																			
ZZZZZZ			20:18																			
ZZZZZZ			20:22																			
ZZZZZZ			20:27																			
ZZZZZZ			20:31																			
ZZZZZZ			20:35																			
ZZZZZZ			20:39																			
ZZZZZZ			20:44																			
ZZZZZZ			20:48																			
CCV 240-250950/25			20:52																			
CCB 240-250950/26			20:56																			
CRI 240-250950/27			21:01																			
ZZZZZZ			21:05																			
ZZZZZZ			21:09																			
ZZZZZZ			21:13																			
ZZZZZZ			21:18																			
ZZZZZZ			21:22																			
ZZZZZZ			21:26																			
ZZZZZZ			21:30																			
CCV 240-250950/35	1		21:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-250950/36	1		21:39	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
MB 240-248806/1-A	1	R	21:43	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
LCS 240-248806/2-A	1	R	21:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			21:52																			
240-69995-C-1-A SD ^5	5	R	21:56	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
ZZZZZZ			22:00																			
240-69995-C-1-B MS	1	R	22:04	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.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/11/2016 19:09 End Date: 10/12/2016 06:41

Lab Sample ID	D / F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
240-69995-C-1-C MSD	1	R	22:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			22:12																				
ZZZZZZ			22:16																				
ZZZZZZ			22:21																				
CCV 240-250950/47	1		22:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-250950/48	1		22:29	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
ZZZZZZ			22:34																				
ZZZZZZ			22:38																				
ZZZZZZ			22:42																				
ZZZZZZ			22:47																				
ZZZZZZ			22:51																				
ZZZZZZ			22:55																				
ZZZZZZ			23:00																				
ZZZZZZ			23:04																				
ZZZZZZ			23:08																				
ZZZZZZ			23:13																				
CCV 240-250950/59	1		23:17	X	X	X	X	X				X		X	X	X	X		X				
CCB 240-250950/60	1		23:21	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
ZZZZZZ			23:26																				
ZZZZZZ			23:30																				
ZZZZZZ			23:34																				
ZZZZZZ			23:39																				
ZZZZZZ			23:43																				
ZZZZZZ			23:48																				
ZZZZZZ			23:52																				
ZZZZZZ			23:56																				
ZZZZZZ			00:00																				
ZZZZZZ			00:05																				
CCV 240-250950/71	1		00:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-250950/72	1		00:13	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
ZZZZZZ			00:17																				
ZZZZZZ			00:21																				
ZZZZZZ			00:26																				
ZZZZZZ			00:30																				
ZZZZZZ			00:34																				
ZZZZZZ			00:39																				
ZZZZZZ			00:43																				
ZZZZZZ			00:47																				
ZZZZZZ			00:52																				
ZZZZZZ			00:56																				
CCV 240-250950/83	1		01:00		X		X			X	X			X			X						
CCB 240-250950/84	1		01:04	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.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/11/2016 19:09 End Date: 10/12/2016 06:41

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			01:09																				
ZZZZZZ			01:13																				
ZZZZZZ			01:17																				
ZZZZZZ			01:22																				
ZZZZZZ			01:26																				
ZZZZZZ			01:30																				
ZZZZZZ			01:35																				
ZZZZZZ			01:39																				
ZZZZZZ			01:44																				
ZZZZZZ			01:48																				
CCV 240-250950/95	1		01:52	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X			
CCB 240-250950/96	1		01:56	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
ZZZZZZ			02:01																				
ZZZZZZ			02:05																				
ZZZZZZ			02:09																				
CCV 240-250950/100			02:14																				
CCB 240-250950/101			02:18																				
ZZZZZZ			02:22																				
ZZZZZZ			02:27																				
ZZZZZZ			02:31																				
ZZZZZZ			02:35																				
ZZZZZZ			02:39																				
CCV 240-250950/107			02:43																				
CCB 240-250950/108			02:48																				
ZZZZZZ			02:52																				
ZZZZZZ			02:56																				
ZZZZZZ			03:01																				
ZZZZZZ			03:05																				
ZZZZZZ			03:09																				
ZZZZZZ			03:14																				
ZZZZZZ			03:18																				
ZZZZZZ			03:22																				
ZZZZZZ			03:27																				
ZZZZZZ			03:31																				
CCV 240-250950/119			03:35																				
CCB 240-250950/120			03:39																				
ZZZZZZ			03:44																				
ZZZZZZ			03:48																				
ZZZZZZ			03:53																				
ZZZZZZ			03:57																				
ZZZZZZ			04:01																				
ZZZZZZ			04:05																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/11/2016 19:09 End Date: 10/12/2016 06:41

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			04:10																					
ZZZZZZ			04:14																					
ZZZZZZ			04:18																					
ZZZZZZ			04:23																					
CCV 240-250950/131			04:27																					
CCB 240-250950/132			04:31																					
ZZZZZZ			04:36																					
ZZZZZZ			04:40																					
ZZZZZZ			04:44																					
ZZZZZZ			04:49																					
ZZZZZZ			04:53																					
ZZZZZZ			04:57																					
ZZZZZZ			05:02																					
ZZZZZZ			05:06																					
ZZZZZZ			05:10																					
ZZZZZZ			05:15																					
CCV 240-250950/143			05:19																					
CCB 240-250950/144			05:23																					
ZZZZZZ			05:28																					
ZZZZZZ			05:32																					
ZZZZZZ			05:36																					
ZZZZZZ			05:41																					
ZZZZZZ			05:45																					
ZZZZZZ			05:49																					
ZZZZZZ			05:54																					
ZZZZZZ			05:58																					
ZZZZZZ			06:02																					
ZZZZZZ			06:07																					
CCV 240-250950/155			06:11																					
CCB 240-250950/156			06:15																					
ZZZZZZ			06:20																					
ZZZZZZ			06:24																					
ZZZZZZ			06:28																					
ZZZZZZ			06:33																					
ZZZZZZ			06:37																					
ZZZZZZ			06:41																					

Prep Types

R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/13/2016 13:00 End Date: 10/14/2016 03:40

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			13:00																				
ICIS 240-251370/2	1		13:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD1 240-251370/3 IC	1		13:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD2 240-251370/4 IC	1		13:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD3 240-251370/5 IC	1		13:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD4 240-251370/6 IC	1		13:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICV 240-251370/7	1		13:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICB 240-251370/8	1		13:30	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CRI 240-251370/9	1		13:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA 240-251370/10	1		13:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-251370/11	1		13:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-251370/12			13:47																				
CCB 240-251370/13			13:51																				
ZZZZZZ			13:56																				
ZZZZZZ			14:00																				
ZZZZZZ			14:05																				
ZZZZZZ			14:09																				
ZZZZZZ			14:13																				
ZZZZZZ			14:18																				
CCV 240-251370/20			14:22																				
CCB 240-251370/21			14:26																				
ZZZZZZ			14:31																				
ZZZZZZ			14:35																				
ZZZZZZ			14:39																				
ZZZZZZ			14:44																				
ZZZZZZ			14:48																				
ZZZZZZ			14:52																				
ZZZZZZ			14:56																				
ZZZZZZ			15:00																				
ZZZZZZ			15:04																				
ZZZZZZ			15:09																				
CCV 240-251370/32			15:13																				
CCB 240-251370/33			15:17																				
ZZZZZZ			15:21																				
ZZZZZZ			15:25																				
CCV 240-251370/36			15:30																				
CCB 240-251370/37			15:34																				
CRI 240-251370/38			15:38																				
ZZZZZZ			15:43																				
ZZZZZZ			15:47																				
ZZZZZZ			15:51																				
ZZZZZZ			15:56																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/13/2016 13:00 End Date: 10/14/2016 03:40

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			16:00																				
ZZZZZZ			16:04																				
ZZZZZZ			16:08																				
ZZZZZZ			16:12																				
ZZZZZZ			16:16																				
CCV 240-251370/48			16:20																				
CCB 240-251370/49			16:25																				
ZZZZZZ			16:29																				
ZZZZZZ			16:33																				
ZZZZZZ			16:38																				
ZZZZZZ			16:42																				
ZZZZZZ			16:46																				
ZZZZZZ			16:50																				
ZZZZZZ			16:55																				
ZZZZZZ			16:59																				
ZZZZZZ			17:03																				
ZZZZZZ			17:08																				
CCV 240-251370/60			17:12																				
CCB 240-251370/61			17:16																				
ZZZZZZ			17:20																				
ZZZZZZ			17:24																				
ZZZZZZ			17:29																				
ZZZZZZ			17:33																				
ZZZZZZ			17:37																				
ZZZZZZ			17:42																				
ZZZZZZ			17:46																				
ZZZZZZ			17:50																				
ZZZZZZ			17:54																				
ZZZZZZ			17:59																				
CCV 240-251370/72			18:03																				
CCB 240-251370/73			18:07																				
ZZZZZZ			18:12																				
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
CCV 240-251370/77	1		18:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-251370/78	1		18:29	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
MB 240-248806/1-A	1	R	18:33	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
LCS 240-248806/2-A	1	R	18:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-70005-21	5	D	18:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-70005-22	5	D	18:46	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-70005-23	5	D	18:50	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-70005-24	5	D	18:55	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.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/13/2016 13:00 End Date: 10/14/2016 03:40

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
240-70005-25	5	D	18:59	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-26	5	D	19:03	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-27	5	D	19:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-28	5	D	19:12	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CCV 240-251370/89	1		19:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-251370/90	1		19:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-29	5	D	19:25	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-30	5	D	19:29	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-31	5	D	19:34	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-32	5	D	19:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-33	5	D	19:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-34	5	D	19:47	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-35	5	D	19:51	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-36	5	D	19:55	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
MB 240-248800/1-A	1	R	20:00	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
LCS 240-248800/2-A	1	R	20:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-251370/101	1		20:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-251370/102	1		20:12	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-1	5	D	20:17	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-1 SD	25	D	20:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			20:25																			
240-70005-1 MS	5	D	20:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-70005-1 MSD	5	D	20:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-70005-2	5	D	20:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-3	5	D	20:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-4	5	D	20:47	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-5	5	D	20:51	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-6	5	D	20:55	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CCV 240-251370/113	1		20:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-251370/114	1		21:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-7	5	D	21:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-8	5	D	21:12	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-9	5	D	21:17	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-10	5	D	21:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-11	5	D	21:25	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-12	5	D	21:30	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-13	5	D	21:34	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-14	5	D	21:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-15	5	D	21:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-70005-16	5	D	21:47	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CCV 240-251370/125	1		21:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-251370/126	1		21:55	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.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/13/2016 13:00 End Date: 10/14/2016 03:40

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	
240-70005-17	5	D	22:00	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-70005-18	5	D	22:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-70005-19	5	D	22:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-70005-20	5	D	22:13	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-251370/131	1		22:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-251370/132	1		22:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			22:26																				
ZZZZZZ			22:30																				
ZZZZZZ			22:34																				
ZZZZZZ			22:38																				
ZZZZZZ			22:42																				
ZZZZZZ			22:46																				
ZZZZZZ			22:51																				
ZZZZZZ			22:55																				
ZZZZZZ			22:59																				
ZZZZZZ			23:03																				
CCV 240-251370/143			23:07																				
CCB 240-251370/144			23:12																				
ZZZZZZ			23:16																				
ZZZZZZ			23:20																				
ZZZZZZ			23:25																				
ZZZZZZ			23:29																				
ZZZZZZ			23:33																				
ZZZZZZ			23:37																				
ZZZZZZ			23:42																				
ZZZZZZ			23:46																				
ZZZZZZ			23:50																				
ZZZZZZ			23:54																				
CCV 240-251370/155			23:59																				
CCB 240-251370/156			00:03																				
ZZZZZZ			00:07																				
ZZZZZZ			00:12																				
ZZZZZZ			00:16																				
ZZZZZZ			00:20																				
ICSA 240-251370/161			00:24																				
ICSAB 240-251370/162			00:29																				
CCV 240-251370/163			00:33																				
CCB 240-251370/164			00:37																				
ZZZZZZ			00:41																				
ZZZZZZ			00:46																				
ZZZZZZ			00:50																				
ZZZZZZ			00:54																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/13/2016 13:00 End Date: 10/14/2016 03:40

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			00:58																					
ZZZZZZ			01:02																					
ZZZZZZ			01:06																					
ZZZZZZ			01:10																					
ZZZZZZ			01:15																					
ZZZZZZ			01:19																					
CCV 240-251370/175			01:23																					
CCB 240-251370/176			01:28																					
ZZZZZZ			01:32																					
ZZZZZZ			01:36																					
ZZZZZZ			01:40																					
ZZZZZZ			01:45																					
ZZZZZZ			01:49																					
ZZZZZZ			01:53																					
ZZZZZZ			01:58																					
ZZZZZZ			02:02																					
ZZZZZZ			02:06																					
ZZZZZZ			02:10																					
CCV 240-251370/187			02:15																					
CCB 240-251370/188			02:19																					
ZZZZZZ			02:23																					
ZZZZZZ			02:28																					
ZZZZZZ			02:32																					
ZZZZZZ			02:36																					
ZZZZZZ			02:40																					
ZZZZZZ			02:45																					
ZZZZZZ			02:49																					
ZZZZZZ			02:53																					
ZZZZZZ			02:57																					
ZZZZZZ			03:01																					
CCV 240-251370/199			03:05																					
CCB 240-251370/200			03:10																					
ZZZZZZ			03:14																					
ZZZZZZ			03:18																					
ZZZZZZ			03:23																					
ZZZZZZ			03:27																					
ZZZZZZ			03:31																					
CCV 240-251370/206			03:36																					
CCB 240-251370/207			03:40																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 10/13/2016 13:00 End Date: 10/14/2016 03:40

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: H2 Method: 7470A

Start Date: 09/29/2016 06:28 End Date: 09/29/2016 12:55

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 240-248755/1-A			06:28	X																			
IC 240-248755/2-A			06:30	X																			
IC 240-248755/3-A			06:32	X																			
IC 240-248755/4-A			06:34	X																			
IC 240-248755/5-A			06:36	X																			
IC 240-248755/6-A			06:38	X																			
ICV 240-248755/7-A	1		06:41	X																			
ICB 240-248755/8-A	1		06:43	X																			
CRA 240-248755/9-A	1		06:45	X																			
CCV 240-248755/10-A			06:47																				
CCB 240-248755/11-A			06:49																				
CCV 240-248755/10-A			06:51																				
CCB 240-248755/11-A			06:53																				
CCV 240-248755/10-A			08:30																				
CCB 240-248755/11-A			08:32																				
ZZZZZZ			08:34																				
ZZZZZZ			08:36																				
ZZZZZZ			08:38																				
ZZZZZZ			08:40																				
ZZZZZZ			08:42																				
ZZZZZZ			08:44																				
ZZZZZZ			08:46																				
ZZZZZZ			08:48																				
ZZZZZZ			08:50																				
ZZZZZZ			08:52																				
CCV 240-248755/10-A			08:54																				
CCB 240-248755/11-A			08:56																				
ZZZZZZ			08:58																				
ZZZZZZ			09:00																				
ZZZZZZ			09:02																				
ZZZZZZ			09:04																				
CCV 240-248755/10-A			09:06																				
CCB 240-248755/11-A			09:08																				
CCV 240-248755/10-A			09:21																				
CCB 240-248755/11-A			09:23																				
ZZZZZZ			09:25																				
ZZZZZZ			09:27																				
ZZZZZZ			09:29																				
ZZZZZZ			09:31																				
ZZZZZZ			09:33																				
ZZZZZZ			09:35																				
CCV 240-248755/10-A	1		09:37	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: H2 Method: 7470A

Start Date: 09/29/2016 06:28 End Date: 09/29/2016 12:55

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
CCB 240-248755/11-A	1		09:39	X																			
ZZZZZZ			09:42																				
ZZZZZZ			09:44																				
ZZZZZZ			09:45																				
ZZZZZZ			09:47																				
ZZZZZZ			09:49																				
ZZZZZZ			09:51																				
ZZZZZZ			09:53																				
ZZZZZZ			09:55																				
ZZZZZZ			09:57																				
MB 240-248812/1-A	1	T	09:59	X																			
CCV 240-248755/10-A	1		10:02	X																			
CCB 240-248755/11-A	1		10:04	X																			
LCS 240-248812/2-A	1	T	10:06	X																			
ZZZZZZ			10:08																				
240-69995-C-1-E MS	1	T	10:10	X																			
240-69995-C-1-F MSD	1	T	10:12	X																			
ZZZZZZ			10:14																				
ZZZZZZ			10:16																				
240-70005-21	1	D	10:18	X																			
240-70005-22	1	D	10:20	X																			
240-70005-23	1	D	10:22	X																			
240-70005-24	1	D	10:24	X																			
CCV 240-248755/10-A	1		10:26	X																			
CCB 240-248755/11-A	1		10:28	X																			
240-70005-25	1	D	10:30	X																			
240-70005-26	1	D	10:32	X																			
240-70005-27	1	D	10:34	X																			
240-70005-28	1	D	10:35	X																			
240-70005-29	1	D	10:37	X																			
240-70005-30	1	D	10:39	X																			
240-70005-31	1	D	10:41	X																			
240-70005-32	1	D	10:43	X																			
240-70005-33	1	D	10:45	X																			
240-70005-34	1	D	10:47	X																			
CCV 240-248755/10-A	1		10:49	X																			
CCB 240-248755/11-A	1		10:51	X																			
240-70005-35	1	D	10:53	X																			
240-70005-36	1	D	10:55	X																			
ZZZZZZ			10:57																				
ZZZZZZ			10:59																				
ZZZZZZ			11:01																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: H2 Method: 7470A

Start Date: 09/29/2016 06:28 End Date: 09/29/2016 12:55

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			11:03																				
ZZZZZZ			11:05																				
ZZZZZZ			11:07																				
ZZZZZZ			11:09																				
ZZZZZZ			11:11																				
CCV 240-248755/10-A	1		11:13	X																			
CCB 240-248755/11-A	1		11:15	X																			
ZZZZZZ			11:17																				
ZZZZZZ			11:19																				
ZZZZZZ			11:21																				
ZZZZZZ			11:23																				
ZZZZZZ			11:25																				
ZZZZZZ			11:27																				
ZZZZZZ			11:29																				
ZZZZZZ			11:30																				
ZZZZZZ			11:32																				
ZZZZZZ			11:34																				
CCV 240-248755/10-A	1		11:36	X																			
CCB 240-248755/11-A	1		11:38	X																			
ZZZZZZ			11:40																				
ZZZZZZ			11:42																				
ZZZZZZ			11:44																				
ZZZZZZ			11:46																				
ZZZZZZ			11:48																				
ZZZZZZ			11:50																				
MB 240-248805/1-A	1	T	11:52	X																			
LCS 240-248805/2-A	1	T	11:54	X																			
240-70005-1	1	D	11:56	X																			
240-70005-1 MS	1	D	11:58	X																			
CCV 240-248755/10-A	1		12:00	X																			
CCB 240-248755/11-A	1		12:02	X																			
240-70005-1 MSD	1	D	12:04	X																			
240-70005-2	1	D	12:06	X																			
240-70005-3	1	D	12:08	X																			
240-70005-4	1	D	12:10	X																			
240-70005-5	1	D	12:12	X																			
240-70005-6	1	D	12:14	X																			
240-70005-7	1	D	12:16	X																			
240-70005-8	1	D	12:18	X																			
240-70005-9	1	D	12:20	X																			
240-70005-10	1	D	12:22	X																			
CCV 240-248755/10-A	1		12:24	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: H2 Method: 7470A

Start Date: 09/29/2016 06:28 End Date: 09/29/2016 12:55

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCB 240-248755/11-A	1		12:26	X																			
240-70005-11	1	D	12:28	X																			
240-70005-12	1	D	12:30	X																			
240-70005-13	1	D	12:32	X																			
240-70005-14	1	D	12:34	X																			
240-70005-15	1	D	12:35	X																			
240-70005-16	1	D	12:37	X																			
240-70005-17	1	D	12:39	X																			
240-70005-18	1	D	12:41	X																			
240-70005-19	1	D	12:43	X																			
240-70005-20	1	D	12:45	X																			
ZZZZZZ			12:47																				
CCV 240-248755/10-A	1		12:49	X																			
CCB 240-248755/11-A	1		12:51	X																			
CCV 240-248755/10-A			12:53																				
CCB 240-248755/11-A			12:55																				

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 2340B

Start Date: 10/14/2016 12:09 End Date: 10/14/2016 12:09

Lab Sample ID	D / F	Type	Time	Analytes																			
				CaCO3	HardCC	MgHARD																	
240-70005-1	1	D	12:09	X	X	X																	
240-70005-2	1	D	12:09	X	X	X																	
240-70005-3	1	D	12:09	X	X	X																	
240-70005-4	1	D	12:09	X	X	X																	
240-70005-5	1	D	12:09	X	X	X																	
240-70005-6	1	D	12:09	X	X	X																	
240-70005-7	1	D	12:09	X	X	X																	
240-70005-8	1	D	12:09	X	X	X																	
240-70005-9	1	D	12:09	X	X	X																	
240-70005-10	1	D	12:09	X	X	X																	
240-70005-11	1	D	12:09	X	X	X																	
240-70005-12	1	D	12:09	X	X	X																	
240-70005-13	1	D	12:09	X	X	X																	
240-70005-14	1	D	12:09	X	X	X																	
240-70005-15	1	D	12:09	X	X	X																	
240-70005-16	1	D	12:09	X	X	X																	
240-70005-17	1	D	12:09	X	X	X																	
240-70005-18	1	D	12:09	X	X	X																	
240-70005-19	1	D	12:09	X	X	X																	
240-70005-20	1	D	12:09	X	X	X																	
240-70005-21	1	D	12:09	X	X	X																	
240-70005-22	1	D	12:09	X	X	X																	
240-70005-23	1	D	12:09	X	X	X																	
240-70005-24	1	D	12:09	X	X	X																	
240-70005-25	1	D	12:09	X	X	X																	
240-70005-26	1	D	12:09	X	X	X																	
240-70005-27	1	D	12:09	X	X	X																	
240-70005-28	1	D	12:09	X	X	X																	
240-70005-29	1	D	12:09	X	X	X																	
240-70005-30	1	D	12:09	X	X	X																	
240-70005-31	1	D	12:09	X	X	X																	
240-70005-32	1	D	12:09	X	X	X																	
240-70005-33	1	D	12:09	X	X	X																	
240-70005-34	1	D	12:09	X	X	X																	
240-70005-35	1	D	12:09	X	X	X																	
240-70005-36	1	D	12:09	X	X	X																	

Prep Types

D = Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Batch Number: 248800 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 09/28/16 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00026	MTICPMSA 00028	MTICPMSB 00029	MTTMHCL 00132
MB 240-248800/1		3005A, 6020		50 mL	50 mL				2.5 mL
LCS 240-248800/2		3005A, 6020		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-70005-D-1	MSA-SW37A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-1 MS	MSA-SW37A-092616	3005A, 6020	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-70005-D-1 MSD	MSA-SW37A-092616	3005A, 6020	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-70005-D-2	MSA-SW37B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-3	MSA-SW37C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-4	MSA-SW37D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-5	MSA-SW38A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-6	MSA-SW38B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-7	MSA-SW38C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-8	MSA-SW38D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-9	MSA-SW39A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-10	MSA-SW39B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-11	MSA-SW39C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-12	MSA-SW39D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-13	MSA-SW40A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-14	MSA-SW40B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-15	MSA-SW40C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-16	MSA-SW40D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-17	MSA-SW41A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-18	MSA-SW41B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-19	MSA-SW41C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-20	MSA-SW41D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00098					
MB 240-248800/1		3005A, 6020		1 mL					
LCS 240-248800/2		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.: 240-70005-1

SDG No.:

Batch Number: 248800 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 09/28/16 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00098					
240-70005-D-1	MSA-SW37A-092616	3005A, 6020	D	1 mL					
240-70005-D-1 MS	MSA-SW37A-092616	3005A, 6020	D	1 mL					
240-70005-D-1 MSD	MSA-SW37A-092616	3005A, 6020	D	1 mL					
240-70005-D-2	MSA-SW37B-092616	3005A, 6020	D	1 mL					
240-70005-D-3	MSA-SW37C-092616	3005A, 6020	D	1 mL					
240-70005-D-4	MSA-SW37D-092616	3005A, 6020	D	1 mL					
240-70005-D-5	MSA-SW38A-092616	3005A, 6020	D	1 mL					
240-70005-D-6	MSA-SW38B-092616	3005A, 6020	D	1 mL					
240-70005-D-7	MSA-SW38C-092616	3005A, 6020	D	1 mL					
240-70005-D-8	MSA-SW38D-092616	3005A, 6020	D	1 mL					
240-70005-D-9	MSA-SW39A-092616	3005A, 6020	D	1 mL					
240-70005-D-10	MSA-SW39B-092616	3005A, 6020	D	1 mL					
240-70005-D-11	MSA-SW39C-092616	3005A, 6020	D	1 mL					
240-70005-D-12	MSA-SW39D-092616	3005A, 6020	D	1 mL					
240-70005-D-13	MSA-SW40A-092616	3005A, 6020	D	1 mL					
240-70005-D-14	MSA-SW40B-092616	3005A, 6020	D	1 mL					
240-70005-D-15	MSA-SW40C-092616	3005A, 6020	D	1 mL					
240-70005-D-16	MSA-SW40D-092616	3005A, 6020	D	1 mL					
240-70005-D-17	MSA-SW41A-092616	3005A, 6020	D	1 mL					
240-70005-D-18	MSA-SW41B-092616	3005A, 6020	D	1 mL					
240-70005-D-19	MSA-SW41C-092616	3005A, 6020	D	1 mL					
240-70005-D-20	MSA-SW41D-092616	3005A, 6020	D	1 mL					

Batch Notes	
Filter Paper ID	9715194
Hot Block ID	HB3
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.: 240-70005-1

SDG No.:

Batch Number: 248800 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 09/28/16 22:00

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.: 240-70005-1

SDG No.:

Batch Number: 248806 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 09/28/16 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00026	MTICPMSA 00028	MTICPMSB 00029	MTTMHCL 00132
MB 240-248806/1		3005A, 6020		50 mL	50 mL				2.5 mL
LCS 240-248806/2		3005A, 6020		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-69995-C-1 MS		3005A, 6020	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-69995-C-1 MSD		3005A, 6020	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-70005-D-21	MSA-SW42A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-22	MSA-SW42B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-23	MSA-SW42C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-24	MSA-SW42D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-25	MSA-SW43A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-26	MSA-SW43B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-27	MSA-SW43C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-28	MSA-SW43D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-29	MSA-SW44A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-30	MSA-SW44B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-31	MSA-SW44C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-32	MSA-SW44D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-33	MSA-SW45A-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-34	MSA-SW45B-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-35	MSA-SW45C-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL
240-70005-D-36	MSA-SW45D-092616	3005A, 6020	D	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00098					
MB 240-248806/1		3005A, 6020		1 mL					
LCS 240-248806/2		3005A, 6020		1 mL					
240-69995-C-1 MS		3005A, 6020	R	1 mL					
240-69995-C-1 MSD		3005A, 6020	R	1 mL					
240-70005-D-21	MSA-SW42A-092616	3005A, 6020	D	1 mL					
240-70005-D-22	MSA-SW42B-092616	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.: 240-70005-1

SDG No.:

Batch Number: 248806 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 09/28/16 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00098					
240-70005-D-23	MSA-SW42C-092616	3005A, 6020	D	1 mL					
240-70005-D-24	MSA-SW42D-092616	3005A, 6020	D	1 mL					
240-70005-D-25	MSA-SW43A-092616	3005A, 6020	D	1 mL					
240-70005-D-26	MSA-SW43B-092616	3005A, 6020	D	1 mL					
240-70005-D-27	MSA-SW43C-092616	3005A, 6020	D	1 mL					
240-70005-D-28	MSA-SW43D-092616	3005A, 6020	D	1 mL					
240-70005-D-29	MSA-SW44A-092616	3005A, 6020	D	1 mL					
240-70005-D-30	MSA-SW44B-092616	3005A, 6020	D	1 mL					
240-70005-D-31	MSA-SW44C-092616	3005A, 6020	D	1 mL					
240-70005-D-32	MSA-SW44D-092616	3005A, 6020	D	1 mL					
240-70005-D-33	MSA-SW45A-092616	3005A, 6020	D	1 mL					
240-70005-D-34	MSA-SW45B-092616	3005A, 6020	D	1 mL					
240-70005-D-35	MSA-SW45C-092616	3005A, 6020	D	1 mL					
240-70005-D-36	MSA-SW45D-092616	3005A, 6020	D	1 mL					

Batch Notes	
Filter Paper ID	9715194
Hot Block ID	HB4
Pipette ID	MP3
Digestion Tube/Cup ID	1512329

Basis	Basis Description
R	Total Recoverable
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.: 240-70005-1

SDG No.:

Batch Number: 248755 Batch Start Date: 09/28/16 08:00 Batch Analyst: Dillon, William K

Batch Method: 7470A Batch End Date: 09/28/16 10:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00049	MTH2S04 00034	MTHGCALW 01322	MTHgICV_00001 00075
ICV 240-248755/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-248755/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-248755/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-248755/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-248755/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00116	MTTMHNO3 00098				
ICV 240-248755/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-248755/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-248755/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-248755/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-248755/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	take out temp in range
Hot Block ID	A2
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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-70005-1

SDG No.:

Batch Number: 248805 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 09/28/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00049	MTH2S04 00034	MTHGCALW 01322	MTKMN04W 00116
MB 240-248805/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-248805/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-70005-D-1	MSA-SW37A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-1 MS	MSA-SW37A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-70005-D-1 MSD	MSA-SW37A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-70005-D-2	MSA-SW37B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-3	MSA-SW37C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-4	MSA-SW37D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-5	MSA-SW38A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-6	MSA-SW38B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-7	MSA-SW38C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-8	MSA-SW38D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-9	MSA-SW39A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-10	MSA-SW39B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-11	MSA-SW39C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-12	MSA-SW39D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-13	MSA-SW40A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-14	MSA-SW40B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-15	MSA-SW40C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-16	MSA-SW40D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-17	MSA-SW41A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-18	MSA-SW41B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-19	MSA-SW41C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-20	MSA-SW41D-092616	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 00098					
MB 240-248805/1		7470A, 7470A		1.25 mL					
LCS 240-248805/2		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.: 240-70005-1

SDG No.:

Batch Number: 248805 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 09/28/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00098					
240-70005-D-1	MSA-SW37A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-1 MS	MSA-SW37A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-1 MSD	MSA-SW37A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-2	MSA-SW37B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-3	MSA-SW37C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-4	MSA-SW37D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-5	MSA-SW38A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-6	MSA-SW38B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-7	MSA-SW38C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-8	MSA-SW38D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-9	MSA-SW39A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-10	MSA-SW39B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-11	MSA-SW39C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-12	MSA-SW39D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-13	MSA-SW40A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-14	MSA-SW40B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-15	MSA-SW40C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-16	MSA-SW40D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-17	MSA-SW41A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-18	MSA-SW41B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-19	MSA-SW41C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-20	MSA-SW41D-092616	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	Take out temps within range
Hot Block ID	C1
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.: 240-70005-1

SDG No.:

Batch Number: 248805 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 09/28/16 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.: 240-70005-1

SDG No.:

Batch Number: 248812 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 09/28/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00049	MTH2S04 00034	MTHGCALW 01322	MTKMN04W 00116
MB 240-248812/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-248812/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-69995-C-1 MS		7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-69995-C-1 MSD		7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-70005-D-21	MSA-SW42A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-22	MSA-SW42B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-23	MSA-SW42C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-24	MSA-SW42D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-25	MSA-SW43A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-26	MSA-SW43B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-27	MSA-SW43C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-28	MSA-SW43D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-29	MSA-SW44A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-30	MSA-SW44B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-31	MSA-SW44C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-32	MSA-SW44D-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-33	MSA-SW45A-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-34	MSA-SW45B-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-35	MSA-SW45C-092616	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-70005-D-36	MSA-SW45D-092616	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 00098					
MB 240-248812/1		7470A, 7470A		1.25 mL					
LCS 240-248812/2		7470A, 7470A		1.25 mL					
240-69995-C-1 MS		7470A, 7470A	T	1.25 mL					
240-69995-C-1 MSD		7470A, 7470A	T	1.25 mL					
240-70005-D-21	MSA-SW42A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-22	MSA-SW42B-092616	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.: 240-70005-1

SDG No.:

Batch Number: 248812 Batch Start Date: 09/28/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 7470A Batch End Date: 09/28/16 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00098					
240-70005-D-23	MSA-SW42C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-24	MSA-SW42D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-25	MSA-SW43A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-26	MSA-SW43B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-27	MSA-SW43C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-28	MSA-SW43D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-29	MSA-SW44A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-30	MSA-SW44B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-31	MSA-SW44C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-32	MSA-SW44D-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-33	MSA-SW45A-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-34	MSA-SW45B-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-35	MSA-SW45C-092616	7470A, 7470A	D	1.25 mL					
240-70005-D-36	MSA-SW45D-092616	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	Take out temps within range
Hot Block ID	C1
Pipette ID	MP1-MP2
Digestion Tube/Cup ID	1512329

Basis	Basis Description
T	Total/NA
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.

SAMPLE IDENTIFICATION	MSA-SW38A-092616	
COMPOUND	Trichloroethene	
COMPOUND AREA	64742	
INTERNAL STANDARD AMOUNT (ng)	20	
INTERNAL STANDARD AREA	860868	
AVERAGE RRF	0.2746	
64742 x 20 x 1 / 860868 x 0.2746	5.48	µg/L
DILUTION FACTOR	1	
5.47745741242597*200	5.48	µg/L

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-70005-1

SDG No.:

Client Sample ID: MSA-SW38A-092616 | Lab Sample ID: 240-70005-5

Matrix: Water | Lab File ID: UXM8440.D

Analysis Method: 8260C | Date Collected: 09/26/2016 11:09

Sample wt/vol: 5(mL) | Date Analyzed: 10/06/2016 19:40

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.: 250232 | 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	7.6		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	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
75-01-4	Vinyl chloride	4.5		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

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161006-58736.b\UXM8440.D
Lims ID: 240-70005-B-5
Client ID: MSA-SW38A-092616
Sample Type: Client
Inject. Date: 06-Oct-2016 19:40:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0058736-012
Operator ID: 001904 Instrument ID: A3UX16

Method: \\ChromNA\Canton\ChromData\A3UX16\20161006-58736.b\8260_16.m
Limit Group: MSV 8260C ICAL
Last Update: 06-Oct-2016 20:02:51 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: laveyt Date: 06-Oct-2016 20:02:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	860868	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.866	0.000	85	610696	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.096	10.095	0.001	94	334091	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	188089	19.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.889	-0.011	96	205236	19.5	
$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	92	778094	17.5	
$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	90	287982	17.6	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62	1.617	1.628	-0.011	97	69160	4.52	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.221				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
28 Methylene Chloride	84		3.099				ND	
29 2-Methyl-2-propanol	59		3.206				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.704				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
35 Vinyl acetate	43		3.739				ND	
36 Isopropyl ether	87		3.775				ND	
38 Tert-butyl ethyl ether	59		4.083				ND	
40 2-Butanone (MEK)	43		4.202				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.202	-0.012	78	100756	7.56	
41 2,2-Dichloropropane	77		4.206				ND	
45 Chlorobromomethane	128		4.391				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
50 1,1-Dichloropropene	75		4.771				ND	
51 Carbon tetrachloride	117		4.771				ND	
53 1,2-Dichloroethane	62		4.949				ND	
54 Benzene	78		4.949				ND	
55 Tert-amyl methyl ether	73		5.044				ND	
58 Trichloroethene	130	5.494	5.494	0.000	97	64742	5.48	
61 1,2-Dichloropropane	63		5.684				ND	
63 Dibromomethane	93		5.779				ND	
65 Dichlorobromomethane	83		5.909				ND	
67 2-Chloroethyl vinyl ether	63		6.170				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.799				ND	
75 Tetrachloroethene	164		7.107				ND	
74 1,3-Dichloropropane	76		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
83 1,1,1,2-Tetrachloroethane	131		7.961				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173	8.649	8.660	-0.011	1	801	0.1884	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
93 Bromobenzene	156		9.111				ND	
95 1,2,3-Trichloropropane	110		9.147				ND	
96 N-Propylbenzene	120		9.218				ND	
97 2-Chlorotoluene	126		9.301				ND	
100 4-Chlorotoluene	126		9.408				ND	

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

Lab Name: TestAmerica Canton Job No.: 240-70005-1 Analy Batch No.: 245431

SDG No.:

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

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0045 0.0039	0.0035	0.0035	0.0036	0.0036	Ave		0.0038				10.2		20.0			
Benzene	1.2117 1.2123	1.1128	1.1716	1.1460	1.1847	Ave		1.1732			0.5000	3.3		20.0			
1,2-Dichloroethane	0.3202 0.3105	0.2996	0.3009	0.3011	0.3023	Ave		0.3058			0.1000	2.6		20.0			
n-Heptane	+++++ 0.1244	0.7151	0.1654	0.1390	0.1274	Lin1	0.5948	0.1125							0.9990		0.9900
Trichloroethene	0.2741 0.2841	0.2542	0.2732	0.2827	0.2792	Ave		0.2746			0.1500	4.0		20.0			
Methylcyclohexane	0.3442 0.3840	0.3491	0.3405	0.3507	0.3686	Ave		0.3562			0.1000	4.7		20.0			
1,2-Dichloropropane	0.2636 0.2758	0.2631	0.2685	0.2627	0.2692	Ave		0.2672			0.1000	1.9		20.0			
Dibromomethane	0.1306 0.1193	0.1154	0.1181	0.1173	0.1200	Ave		0.1201				4.5		20.0			
1,4-Dioxane	+++++ 0.0013	+++++	0.0010	0.0011	0.0012	Ave		0.0011				9.9		20.0			
Bromodichloromethane	0.3324 0.3308	0.3027	0.3176	0.3127	0.3278	Ave		0.3207			0.1500	3.7		20.0			
2-Chloroethyl vinyl ether	0.1142 0.1191	0.1056	0.1114	0.1131	0.1227	Ave		0.1143				5.3		20.0			
cis-1,3-Dichloropropene	0.4252 0.4292	0.3840	0.4230	0.4125	0.4258	Ave		0.4166			0.1500	4.1		20.0			
4-Methyl-2-pentanone	0.1371 0.1420	0.1262	0.1351	0.1336	0.1378	Ave		0.1353			0.0500	3.9		20.0			
Toluene	1.7512 1.7872	1.5727	1.7282	1.6984	1.7218	Ave		1.7099			0.4000	4.3		20.0			
trans-1,3-Dichloropropene	0.4907 0.4905	0.4258	0.4585	0.4597	0.4779	Ave		0.4672			0.1000	5.3		20.0			
Ethyl methacrylate	0.3199 0.3566	0.3152	0.3330	0.3238	0.3474	Ave		0.3327				4.9		20.0			
1,1,2-Trichloroethane	0.2737 0.2588	0.2294	0.2537	0.2468	0.2540	Ave		0.2527			0.1000	5.8		20.0			
1,3-Dichloropropane	0.4673 0.4810	0.4784	0.4775	0.4691	0.4856	Ave		0.4765				1.5		20.0			
Tetrachloroethene	0.2611 0.2926	0.2648	0.2726	0.2768	0.2850	Ave		0.2755			0.1500	4.3		20.0			
2-Hexanone	0.1223 0.1259	0.1205	0.1170	0.1194	0.1226	Ave		0.1213			0.0500	2.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Sample Report

Sample Table

Sample Name	240-70005-d-21-a@5
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10101316C.b
Acq Date Time	2016-10-13T18:42:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

MSA-SW42A-092616
Barium: 64 ug/L

12.758 * 5 dilution = 63.79 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	7.483	7.483	3.39	401405	0.00	10000	
Be	9	6	2	NoGas	0.124	0.124	7.51	837	0.01	2000	
B	11	45	2	NoGas	231.257	231.257	3.57	1012206	0.02	300	
Na	23	45	1	He	451752.042	451752.042	7.83	427721790	0.11	500000	
Mg	24	45	1	He	55202.084	55202.084	9.25	25656444	0.22	500000	
Al	27	45	1	He	46.818	46.818	5.92	7972	0.59	200000	
K	39	45	1	He	17151.697	17151.697	6.73	6593128	0.26	500000	
Ca	44	45	1	He	18429.079	18429.079	9.13	361032	5.10	500000	
Ti	47	45	1	He	0.640	0.640	29.08	96	0.67	2500	
V	51	45	1	He	0.328	0.328	41.14	1791	0.02	10000	
Cr	52	45	1	He	0.311	0.311	12.37	2776	0.01	10000	
Mn	55	45	1	He	30.154	30.154	8.21	99652	0.03	10000	
Fe	56	45	1	He	99.883	99.883	9.39	465475	0.02	200000	
Co	59	45	1	He	0.198	0.198	10.23	2009	0.01	5000	
Ni	60	45	1	He	0.691	0.691	13.17	1952	0.04	10000	
Cu	63	45	1	He	0.904	0.904	12.59	7564	0.01	10000	
Zn	66	45	1	He	2.129	2.129	9.04	2974	0.07	10000	
As	75	115	1	He	0.570	0.570	7.76	531	0.11	10000	
Se	78	115	1	He	0.584	0.584	29.68	64	0.92	10000	
Sr	88	103	1	He	372.581	372.581	7.76	1425633	0.03	10000	
Mo	95	103	1	He	0.809	0.809	3.91	2851	0.03	2000	
Ag	107	103	1	He	0.009	0.009	32.75	133	0.01	300	
Cd	111	115	1	He	0.088	0.088	31.18	159	0.06	4000	
Sn	118	115	1	He	0.790	0.790	13.26	4001	0.02	2000	
Sb	123	115	1	He	0.268	0.268	3.10	1220	0.02	200	
Ba	137	115	1	He	12.758	12.758	8.79	21700	0.06	10000	
W	182	159	1	He	0.282	0.282	7.30	5642	0.00	2500	
Tl	205	165	1	He	0.052	0.052	17.92	1569	0.00	2000	
Pb	208	165	1	He	0.209	0.209	17.39	8593	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	3491623	1.12	4204088	83.05	60	120	
Sc	45	1	He	737944	9.29	944203	78.16	60	120	
Sc	45	2	NoGas	15658480	0.72	18518562	84.56	60	120	
Rh	103	1	He	3796427	8.72	5458838	69.55	60	120	
In	115	1	He	1687151	8.55	2188011	77.11	60	120	
Tb	159	1	He	5784516	8.54	7033264	82.25	60	120	
Ho	165	1	He	5929572	9.22	7164781	82.76	60	120	
Bi	209	1	He	4122807	8.29	5386861	76.53	60	120	

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **M. MARTIN** **DATE:** **NOVEMBER 10, 2016**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION –HEXAVALENT CHROMIUM**
LOCKHEED MARTIN CORPORATION (LMC) – FROG MORTAR CREEK
SDG TMM-073

SAMPLES: 36/Aqueous/

MSA-SW37A-092616	MSA-SW37B-092616	MSA-SW37C-092616
MSA-SW37D-092616	MSA-SW38A-092616	MSA-SW38B-092616
MSA-SW38C-092616	MSA-SW38D-092616	MSA-SW39A-092616
MSA-SW39B-092616	MSA-SW39C-092616	MSA-SW39D-092616
MSA-SW40A-092616	MSA-SW40B-092616	MSA-SW40C-092616
MSA-SW40D-092616	MSA-SW41A-092616	MSA-SW41B-092616
MSA-SW41C-092616	MSA-SW41D-092616	MSA-SW42A-092616
MSA-SW42B-092616	MSA-SW42C-092616	MSA-SW42D-092616
MSA-SW43A-092616	MSA-SW43B-092616	MSA-SW43C-092616
MSA-SW43D-092616	MSA-SW44A-092616	MSA-SW44B-092616
MSA-SW44C-092616	MSA-SW44D-092616	MSA-SW45A-092616
MSA-SW45B-092616	MSA-SW45C-092616	MSA-SW45D-092616

Overview

The sample set for LMC Frog Mortar Creek, SDG TMM-073 consisted of thirty-six (36) aqueous environmental samples. The samples were analyzed for hexavalent chromium. No field duplicate sample pair was included in these SDGs.

The samples were collected by Tetra Tech, Inc. on September 26, 2016 and analyzed by ALS Environmental Laboratory. All analyses were conducted in accordance with EPA Method 218.6 for hexavalent chromium analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, initial/continuing calibrations, laboratory method/preparation blanks, laboratory control sample results, surrogate spike recovery, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

No major issues were noted.

Minor

Matrix spike/matrix spike duplicate percent recoveries were less than quality control limits for affecting samples MSA-SW37A-092616, MSA-SW39C-092616, and MSA-SW42A-092616. The nondetect hexavalent chromium results for these samples were qualified as estimated (UJ).

Notes

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: Matrix spike recoveries were less than quality control limits.

The data for these analyses were reviewed with reference to the "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.
Leanne Ganser
Environmental Scientist/Data Validator

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

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

Appendix A

Qualified Analytical Results

Qualifier Codes:

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

PROJ_NO: 07804	NSAMPLE	MSA-SW37A-092616			MSA-SW37B-092616			MSA-SW37C-092616			MSA-SW37D-092616		
SDG: TMM-073	LAB_ID	2177669001			2177669002			2177669003			2177669004		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	D	0.052	U		0.052	U		0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW38A-092616			MSA-SW38B-092616			MSA-SW38C-092616			MSA-SW38D-092616		
SDG: TMM-073	LAB_ID	2177669005			2177669006			2177669007			2177669008		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-092616			MSA-SW39B-092616			MSA-SW39C-092616			MSA-SW39D-092616		
SDG: TMM-073	LAB_ID	2177669009			2177669010			2177669011			2177669012		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	D	0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW40A-092616			MSA-SW40B-092616			MSA-SW40C-092616			MSA-SW40D-092616		
SDG: TMM-073	LAB_ID	2177669013			2177669014			2177669015			2177669016		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-092616			MSA-SW41B-092616			MSA-SW41C-092616			MSA-SW41D-092616		
SDG: TMM-073	LAB_ID	2177669017			2177669018			2177669019			2177669020		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-092616			MSA-SW42B-092616			MSA-SW42C-092616			MSA-SW42D-092616		
SDG: TMM-073	LAB_ID	2177669021			2177669022			2177669023			2177669024		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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	UJ	D	0.052	U		0.12	J	P	0.052	U	

PROJ_NO: 07804	NSAMPLE	MSA-SW43A-092616			MSA-SW43B-092616			MSA-SW43C-092616			MSA-SW43D-092616		
SDG: TMM-073	LAB_ID	2177669025			2177669026			2177669027			2177669028		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-092616			MSA-SW44B-092616			MSA-SW44C-092616			MSA-SW44D-092616		
SDG: TMM-073	LAB_ID	2177669029			2177669030			2177669031			2177669032		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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-092616			MSA-SW45B-092616			MSA-SW45C-092616			MSA-SW45D-092616		
SDG: TMM-073	LAB_ID	2177669033			2177669034			2177669035			2177669036		
FRACTION: MISCF	SAMP_DATE	9/26/2016			9/26/2016			9/26/2016			9/26/2016		
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

ALS Environmental

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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: 2177669 TMM073|112IC07804

Lab ID: **2177669001** Date Collected: 9/26/2016 12:42 Matrix: Water

Sample ID: **MSA-SW37A-092616** Date Received: 9/26/2016 21:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND	1	ug/L	0.25	0.052	EPA 218.6		9/27/16 09:17	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669002** Date Collected: 9/26/2016 12:47 Matrix: Water

Sample ID: **MSA-SW37B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 09:40	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669003** Date Collected: 9/26/2016 12:51 Matrix: Water

Sample ID: **MSA-SW37C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 09:48	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669004** Date Collected: 9/26/2016 12:56 Matrix: Water

Sample ID: **MSA-SW37D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 09:55	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669005** Date Collected: 9/26/2016 11:09 Matrix: Water

Sample ID: **MSA-SW38A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 10:03	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669006** Date Collected: 9/26/2016 11:15 Matrix: Water

Sample ID: **MSA-SW38B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 10:11	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669007** Date Collected: 9/26/2016 11:21 Matrix: Water

Sample ID: **MSA-SW38C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 04:16	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669008** Date Collected: 9/26/2016 11:27 Matrix: Water

Sample ID: **MSA-SW38D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 04:23	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669009** Date Collected: 9/26/2016 08:55 Matrix: Water

Sample ID: **MSA-SW39A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 04:31	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

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669010** Date Collected: 9/26/2016 09:00 Matrix: Water

Sample ID: **MSA-SW39B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 04:39	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669011** Date Collected: 9/26/2016 09:06 Matrix: Water

Sample ID: **MSA-SW39C-092616** Date Received: 9/26/2016 21:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND	1	ug/L	0.25	0.052	EPA 218.6		9/27/16 05:10	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669012** Date Collected: 9/26/2016 09:13 Matrix: Water

Sample ID: **MSA-SW39D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 05:33	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669013** Date Collected: 9/26/2016 11:43 Matrix: Water

Sample ID: **MSA-SW40A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 05:41	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669014** Date Collected: 9/26/2016 11:47 Matrix: Water

Sample ID: **MSA-SW40B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 05:49	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669015** Date Collected: 9/26/2016 11:51 Matrix: Water

Sample ID: **MSA-SW40C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 05:57	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669016** Date Collected: 9/26/2016 11:57 Matrix: Water

Sample ID: **MSA-SW40D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 06:05	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669017** Date Collected: 9/26/2016 10:42 Matrix: Water

Sample ID: **MSA-SW41A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 06:12	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669018** Date Collected: 9/26/2016 10:45 Matrix: Water

Sample ID: **MSA-SW41B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 06:20	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669019** Date Collected: 9/26/2016 10:50 Matrix: Water

Sample ID: **MSA-SW41C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 06:28	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669020** Date Collected: 9/26/2016 10:54 Matrix: Water

Sample ID: **MSA-SW41D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 06:35	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669021** Date Collected: 9/26/2016 12:15 Matrix: Water

Sample ID: **MSA-SW42A-092616** Date Received: 9/26/2016 21:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND	1	ug/L	0.25	0.052	EPA 218.6		9/27/16 07:22	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669022** Date Collected: 9/26/2016 12:20 Matrix: Water

Sample ID: **MSA-SW42B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 07:45	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669023** Date Collected: 9/26/2016 12:24 Matrix: Water

Sample ID: **MSA-SW42C-092616** Date Received: 9/26/2016 21:20

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	0.12J	J	ug/L	0.25	0.052	EPA 218.6		9/27/16 07:52	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669024** Date Collected: 9/26/2016 12:26 Matrix: Water

Sample ID: **MSA-SW42D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 08:00	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669025** Date Collected: 9/26/2016 10:14 Matrix: Water

Sample ID: **MSA-SW43A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 08:08	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669026** Date Collected: 9/26/2016 10:18 Matrix: Water

Sample ID: **MSA-SW43B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 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

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State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669027** Date Collected: 9/26/2016 10:22 Matrix: Water

Sample ID: **MSA-SW43C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669028** Date Collected: 9/26/2016 10:26 Matrix: Water

Sample ID: **MSA-SW43D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 08:31	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669029** Date Collected: 9/26/2016 09:48 Matrix: Water

Sample ID: **MSA-SW44A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 08:39	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669030** Date Collected: 9/26/2016 09:54 Matrix: Water

Sample ID: **MSA-SW44B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 08:46	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669031** Date Collected: 9/26/2016 09:57 Matrix: Water

Sample ID: **MSA-SW44C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 03:13	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669032** Date Collected: 9/26/2016 10:07 Matrix: Water

Sample ID: **MSA-SW44D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 03:37	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669033** Date Collected: 9/26/2016 09:23 Matrix: Water

Sample ID: **MSA-SW45A-092616** Date Received: 9/26/2016 21:20

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		9/27/16 03:44	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669034** Date Collected: 9/26/2016 09:30 Matrix: Water

Sample ID: **MSA-SW45B-092616** Date Received: 9/26/2016 21:20

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		9/27/16 03:52	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

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669035** Date Collected: 9/26/2016 09:36 Matrix: Water

Sample ID: **MSA-SW45C-092616** Date Received: 9/26/2016 21:20

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		9/27/16 04:00	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 2177669 TMM073|112IC07804

Lab ID: **2177669036** Date Collected: 9/26/2016 09:41 Matrix: Water

Sample ID: **MSA-SW45D-092616** Date Received: 9/26/2016 21:20

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		9/27/16 04:08	MBW	A

Debra J Musser

Ms. Debra J. Musser
Project Coordinator

Appendix C

Support Documentation

Tetra Tech, Inc.

ALS-Middletown
Case Narrative
TMM-073

Sample Management

This report contains the results of the analysis of thirty-six (36) water samples collected on September 26, 2016. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The samples arrived at ALS via courier on September 26, 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 2414767, 2414769, 2414777, and 2414779, were analyzed initially and every 20 samples. The recoveries were within the QC limits.

Spikes. Matrix spike and matrix spike duplicate analyses, identified as 2414770 and 2414771, were performed on sample 2177669001 (MSA-SW37A-092616). The spike recoveries were lower than the QC limits. The relative percent difference between the spikes were within the QC limits.

Matrix spike and matrix spike duplicate analyses, identified as 2414774 and 2414775, were performed on sample 2177669011 (MSA-SW39C-092616). The spike recoveries were lower than the QC limits. The relative percent difference between the spikes were within the QC limits.

Matrix spike and matrix spike duplicate analyses, identified as 2414780 and 2414781, were performed on sample 2177669021 (MSA-SW42A-092616). The spike recoveries were lower than the QC limits. The relative percent difference between the spikes were within the QC limits.

Matrix spike and matrix spike duplicate analyses, identified as 2414784 and 2414785, were performed on sample 2177669031 (MSA-SW44C-092616). The spike recoveries and the relative percent difference between the spikes were all within the QC limits.

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: 10/12/2016

DJM

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

21776699

Client Contact	Project Manager: Tony Apanavage	Site Contact: Josh Mullis	Date: 9/26/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Mustef	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) W			
(301) 528-3021 Phone	TAT if different from Below: 21 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks 24 Hr HLD TIME			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
PO # 1127607604	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium
MSA-SW37A-092616	9/26/2016	1242	SW	Water	1		x
MSA-SW37B-092616	9/26/2016	1247	SW	Water	1		x
MSA-SW37C-092616	9/26/2016	1251	SW	Water	1		x
MSA-SW37D-092616	9/26/2016	1256	SW	Water	1		x
MSA-SW38A-092616	9/26/2016	1109	SW	Water	1		x
MSA-SW38B-092616	9/26/2016	1115	SW	Water	1		x
MSA-SW38C-092616	9/26/2016	1121	SW	Water	1		x
MSA-SW38D-092616	9/26/2016	1127	SW	Water	1		x
MSA-SW39A-092616	9/26/2016	0855	SW	Water	1		x
MSA-SW39B-092616	9/26/2016	0900	SW	Water	1		x
MSA-SW39C-092616	9/26/2016	0906	SW	Water	1		x
MSA-SW39D-092616	9/26/2016	0913	SW	Water	1		x
							1

	Y	N	Initials	
Custody Seals Present?			UMG	Cooler Temp: 1 °C
(if present) Seals Intact?				Cooler #:
Received on Ice?				
COC/Labls 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.** Must be filtered in LAB

	Company	Date/Time		Company	Date/Time
Relinquished by:	Tetra Tech	9/26/16 1630	Received by:	ALS	9/26/16 1630
Relinquished by:	ALS	9/26	Received by:		92619 1720
Relinquished by:	ALS	926 2000	Received by:	ALS	09/26/16 2120

UMG 09/27/16 0120

DJM

1669

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Josh Mullis	Date: 9/26/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Mullis	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) W			
(301) 528-3021 Phone	TAT if different from Below: 21 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks 24 n/a			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: Mullis
Site: MSA Frog Mortar Creek	☐ 2 days Hold Time			
PO # 112IC07804	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW40A-092616	9/26/2016	1143	SW	Water	1		x	
MSA-SW40B-092616	9/26/2016	1147	SW	Water	1		x	
MSA-SW40C-092616	9/26/2016	1151	SW	Water	1		x	
MSA-SW40D-092616	9/26/2016	1157	SW	Water	1		x	
MSA-SW41A-092616	9/26/2016	1042	SW	Water	1		x	
MSA-SW41B-092616	9/26/2016	1045	SW	Water	1		x	
MSA-SW41C-092616	9/26/2016	1050	SW	Water	1		x	
MSA-SW41D-092616	9/26/2016	1054	SW	Water	1		x	
MSA-SW42A-092616	9/26/2016	1215	SW	Water	1		x	
MSA-SW42B-092616	9/26/2016	1220	SW	Water	1		x	
MSA-SW42C-092616	9/26/2016	1224	SW	Water	1		x	
MSA-SW42D-092616	9/26/2016	1226	SW	Water	1		x	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							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 #.

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,** Must be filtered in LAB

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Josh Mullis	Tetra Tech	9/26/16 1630		ALS	9/26/16 1630
	ALS	9/26/16		ALS	92616 1730
(2)	ALS	926 2120	Linda Crawford	ALS	09/27/16 2120

LMG 09/27/16 0126

DJM

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Josh Mullis	Date: 9/26/2016	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	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) W			
(301) 528-3021 Phone	TAT if different from Below: 21 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks 24 HR			
Project Name: MSA Surface Water Sampling	☐ 1 week H2O TIME			Sampler: MILES
Site: MSA Frog Mortar Creek	☐ 2 days			
PO # 1121607804	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium
MSA-SW43A-092616	9/26/2016	1014	SW	Water	1		x
MSA-SW43B-092616	9/26/2016	1018	SW	Water	1		x
MSA-SW43C-092616	9/26/2016	1022	SW	Water	1		x
MSA-SW43D-092616	9/26/2016	1026	SW	Water	1		x
MSA-SW44A-092616	9/26/2016	0948	SW	Water	1		x
MSA-SW44B-092616	9/26/2016	0954	SW	Water	1		x
MSA-SW44C-092616	9/26/2016	0957	SW	Water	1		x
MSA-SW44D-092616	9/26/2016	1007	SW	Water	1		x
MSA-SW45A-092616	9/26/2016	0923	SW	Water	1		x
MSA-SW45B-092616	9/26/2016	0930	SW	Water	1		x
MSA-SW45C-092616	9/26/2016	0936	SW	Water	1		x
MSA-SW45D-092616	9/26/2016	0941	SW	Water	1		x
							1

Sample Specific Notes:

	Y	N	Initials
Custody Seals Present?			UMG
(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.** Must be sampled in LAB

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	9/26/16 1635	[signature]	ALS	9/26/16 1630
[signature]	ALS	9/26	[signature]	ALS	9/26/16 1720
[signature]	ALS	9/26 2120	[signature]	ALS	09/27/16 0220

UMG 09/27/16 0226

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: 2177669 TMM073|112IC07804

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2177669001	MSA-SW37A-092616	Water	9/26/2016 12:42	9/26/2016 21:20	Collected by Client
2177669002	MSA-SW37B-092616	Water	9/26/2016 12:47	9/26/2016 21:20	Collected by Client
2177669003	MSA-SW37C-092616	Water	9/26/2016 12:51	9/26/2016 21:20	Collected by Client
2177669004	MSA-SW37D-092616	Water	9/26/2016 12:56	9/26/2016 21:20	Collected by Client
2177669005	MSA-SW38A-092616	Water	9/26/2016 11:09	9/26/2016 21:20	Collected by Client
2177669006	MSA-SW38B-092616	Water	9/26/2016 11:15	9/26/2016 21:20	Collected by Client
2177669007	MSA-SW38C-092616	Water	9/26/2016 11:21	9/26/2016 21:20	Collected by Client
2177669008	MSA-SW38D-092616	Water	9/26/2016 11:27	9/26/2016 21:20	Collected by Client
2177669009	MSA-SW39A-092616	Water	9/26/2016 08:55	9/26/2016 21:20	Collected by Client
2177669010	MSA-SW39B-092616	Water	9/26/2016 09:00	9/26/2016 21:20	Collected by Client
2177669011	MSA-SW39C-092616	Water	9/26/2016 09:06	9/26/2016 21:20	Collected by Client
2177669012	MSA-SW39D-092616	Water	9/26/2016 09:13	9/26/2016 21:20	Collected by Client
2177669013	MSA-SW40A-092616	Water	9/26/2016 11:43	9/26/2016 21:20	Collected by Client
2177669014	MSA-SW40B-092616	Water	9/26/2016 11:47	9/26/2016 21:20	Collected by Client
2177669015	MSA-SW40C-092616	Water	9/26/2016 11:51	9/26/2016 21:20	Collected by Client
2177669016	MSA-SW40D-092616	Water	9/26/2016 11:57	9/26/2016 21:20	Collected by Client
2177669017	MSA-SW41A-092616	Water	9/26/2016 10:42	9/26/2016 21:20	Collected by Client
2177669018	MSA-SW41B-092616	Water	9/26/2016 10:45	9/26/2016 21:20	Collected by Client
2177669019	MSA-SW41C-092616	Water	9/26/2016 10:50	9/26/2016 21:20	Collected by Client
2177669020	MSA-SW41D-092616	Water	9/26/2016 10:54	9/26/2016 21:20	Collected by Client
2177669021	MSA-SW42A-092616	Water	9/26/2016 12:15	9/26/2016 21:20	Collected by Client
2177669022	MSA-SW42B-092616	Water	9/26/2016 12:20	9/26/2016 21:20	Collected by Client
2177669023	MSA-SW42C-092616	Water	9/26/2016 12:24	9/26/2016 21:20	Collected by Client
2177669024	MSA-SW42D-092616	Water	9/26/2016 12:26	9/26/2016 21:20	Collected by Client
2177669025	MSA-SW43A-092616	Water	9/26/2016 10:14	9/26/2016 21:20	Collected by Client
2177669026	MSA-SW43B-092616	Water	9/26/2016 10:18	9/26/2016 21:20	Collected by Client
2177669027	MSA-SW43C-092616	Water	9/26/2016 10:22	9/26/2016 21:20	Collected by Client
2177669028	MSA-SW43D-092616	Water	9/26/2016 10:26	9/26/2016 21:20	Collected by Client
2177669029	MSA-SW44A-092616	Water	9/26/2016 09:48	9/26/2016 21:20	Collected by Client
2177669030	MSA-SW44B-092616	Water	9/26/2016 09:54	9/26/2016 21:20	Collected by Client
2177669031	MSA-SW44C-092616	Water	9/26/2016 09:57	9/26/2016 21:20	Collected by Client
2177669032	MSA-SW44D-092616	Water	9/26/2016 10:07	9/26/2016 21:20	Collected by Client
2177669033	MSA-SW45A-092616	Water	9/26/2016 09:23	9/26/2016 21:20	Collected by Client
2177669034	MSA-SW45B-092616	Water	9/26/2016 09:30	9/26/2016 21:20	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: 2177669 TMM073|112IC07804

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2177669035	MSA-SW45C-092616	Water	9/26/2016 09:36	9/26/2016 21:20	Collected by Client
2177669036	MSA-SW45D-092616	Water	9/26/2016 09:41	9/26/2016 21:20	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: 2177669 TMM073|112IC07804

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 6B

Inorganic Initial and Continuing Calibration Verification Summary

Analysis Method: EPA 218.6 SDG No. TMM073

Instrument ID: IC-4 Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2414768	Hexavalent Chromium	CCVL	09/27/2016 02:58	5	4.6	93		90 - 110
2414772	Hexavalent Chromium	CCVH	09/27/2016 04:55	20	20.2	101		90 - 110
2414778	Hexavalent Chromium	CCVL	09/27/2016 07:06	5	4.7	93.1		90 - 110
2414782	Hexavalent Chromium	CCVH	09/27/2016 09:02	20	19.5	97.7		90 - 110
2414786	Hexavalent Chromium	CCVL	09/27/2016 10:26	5	4.6	92.6		90 - 110

(1) The following qualifiers are used:

* : Values outside of acceptable limits

Comments:

Form 4B
Inorganic Blank Summary

Analysis Method: EPA 218.6
Instrument: IC-4

SDG No.: TMM073

Sample ID	Analyte	Type	Matrix	Analyzed	Result	Q (1)	Units
2414766	Hexavalent Chromium	MB	QC-Water	09/27/2016 02:42	0.25	U	ug/L
2414773	Hexavalent Chromium	MB	QC-Water	09/27/2016 05:02	0.25	U	ug/L
2414776	Hexavalent Chromium	MB	QC-Water	09/27/2016 06:51	0.25	U	ug/L
2414783	Hexavalent Chromium	MB	QC-Water	09/27/2016 09:09	0.25	U	ug/L
2414787	Hexavalent Chromium	MB	QC-Water	09/27/2016 10:34	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.: TMM073

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 (%)
2414767	Hexavalent Chromium	MRL	09/27/2016 02:50	0.25	0.25	98.8		50 - 150
2414769	Hexavalent Chromium	LCS	09/27/2016 03:05	10	9.6	96.5		90 - 110
2414777	Hexavalent Chromium	MRL	09/27/2016 06:59	0.25	0.28	113		50 - 150
2414779	Hexavalent Chromium	LCS	09/27/2016 07:14	10	9.6	95.7		90 - 110

(1) The following qualifiers are used:

* : Values outside of acceptable limits

Comments:

Sample Description

MSA-SW37A-092616

Form 3A

Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TMM073
Units: ug/L
Lab Sample ID: 2177669001
Lab MS Sample ID: 2414770
Lab MSD Sample ID: 2414771

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	3.7	73.8	*	90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	3.7	74.4	*	90 - 110	0.84		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW39C-092616

Form 3A

Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TMM073
Units: ug/L
Lab Sample ID: 2177669011
Lab MS Sample ID: 2414774
Lab MSD Sample ID: 2414775

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	4.4	88.7	*	90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	4.4	88.1	*	90 - 110	0.66		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW42A-092616

Form 3A

Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TMM073
Units: ug/L
Lab Sample ID: 2177669021
Lab MS Sample ID: 2414780
Lab MSD Sample ID: 2414781

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	3.7	73.2	*	90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	3.8	76.1	*	90 - 110	3.94		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW44C-092616

Form 3A

Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TMM073
Units: ug/L
Lab Sample ID: 2177669031
Lab MS Sample ID: 2414784
Lab MSD Sample ID: 2414785

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	4.5	90.4		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	4.7	93.2		90 - 110	3.03		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Title: 4-092716
Datasource: WETCHEMIC
Location: ICS2100\ICS2100 Sequence\Cr +6\2016\4-1609
Timebase: ICS2100 Created: 9/27/2016 1:24:39 AM by almdt.nouser
#Samples: 69 Last Update: 9/27/2016 6:03:31 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_092716	MBW	
2	2	Cal Std 2	1	CAL		cr+6	218_6_092716	MBW	
3	3	Cal Std 3	1	CAL		cr+6	218_6_092716	MBW	
4	4	Cal Std 4	1	CAL		cr+6	218_6_092716	MBW	
5	5	Cal Std 5	1	CAL		cr+6	218_6_092716	MBW	
6	6	Cal Std 6	1	CAL		cr+6	218_6_092716	MBW	
7	7	2414766	1	MB	LRB	cr+6	218_6_092716	MBW	176647
8	8	2414767	1	MRL	MRL	cr+6	218_6_092716	MBW	176647
9	9	2414768	1	CCVL	LFB	cr+6	218_6_092716	MBW	176647
10	10	2414769	1	LCS	QCS	cr+6	218_6_092716	MBW	176647
11	11	2177669031	1	SAMPLE		cr+6	218_6_092716	MBW	176647
12	12	2414784	1	MS		cr+6	218_6_092716	MBW	176647
13	13	2414785	1	MSD		cr+6	218_6_092716	MBW	176647
14	14	2177669032	1	SAMPLE		cr+6	218_6_092716	MBW	176647
15	15	2177669033	1	SAMPLE		cr+6	218_6_092716	MBW	176647
16	16	2177669034	1	SAMPLE		cr+6	218_6_092716	MBW	176647
17	17	2177669035	1	SAMPLE		cr+6	218_6_092716	MBW	176647
18	18	2177669036	1	SAMPLE		cr+6	218_6_092716	MBW	176647
19	19	2177669007	1	SAMPLE		cr+6	218_6_092716	MBW	176647
20	20	2177669008	1	SAMPLE		cr+6	218_6_092716	MBW	176647
21	21	2177669009	1	SAMPLE		cr+6	218_6_092716	MBW	176647
22	22	2177669010	1	SAMPLE		cr+6	218_6_092716	MBW	176647
23	23	2177669010DUP	1	DUP		cr+6	218_6_092716	MBW	176647
24	24	2414772	1	CCVH		cr+6	218_6_092716	MBW	176647
25	25	2414773	1	MB		cr+6	218_6_092716	MBW	176647
26	26	2177669011	1	SAMPLE		cr+6	218_6_092716	MBW	176647
27	27	2414774	1	MS		cr+6	218_6_092716	MBW	176647
28	28	2414775	1	MSD		cr+6	218_6_092716	MBW	176647
29	29	2177669012	1	SAMPLE		cr+6	218_6_092716	MBW	176647
30	30	2177669013	1	SAMPLE		cr+6	218_6_092716	MBW	176647
31	31	2177669014	1	SAMPLE		cr+6	218_6_092716	MBW	176647
▶	32	2177669015	1	SAMPLE		cr+6	218_6_092716	MBW	176647
33	33	2177669016	1	SAMPLE		cr+6	218_6_092716	MBW	176647
34	34	2177669017	1	SAMPLE		cr+6	218_6_092716	MBW	176647
35	35	2177669018	1	SAMPLE		cr+6	218_6_092716	MBW	176647
36	36	2177669019	1	SAMPLE		cr+6	218_6_092716	MBW	176647
37	37	2177669020	1	SAMPLE		cr+6	218_6_092716	MBW	176647
38	38	2177669020DUP	1	DUP		cr+6	218_6_092716	MBW	176647
39	39	2414776	1	MB	LRB	cr+6	218_6_092716	MBW	176648
40	40	2414777	1	MRL	MRL	cr+6	218_6_092716	MBW	176648
41	41	2414778	1	CCVL	LFB	cr+6	218_6_092716	MBW	176648

Chromeleon © Dionex Corporation, Version 6.80 SR11d Build 3302 (196279)

Title: 4-092716
Datasource: WETCHEMIC
Location: ICS2100\ICS2100 Sequence\Cr +6\2016\4-1609
Timebase: ICS2100 Created: 9/27/2016 1:24:39 AM by almdt.nouser
#Samples: 69 Last Update: 9/27/2016 6:03:31 AM by almdt.nouser

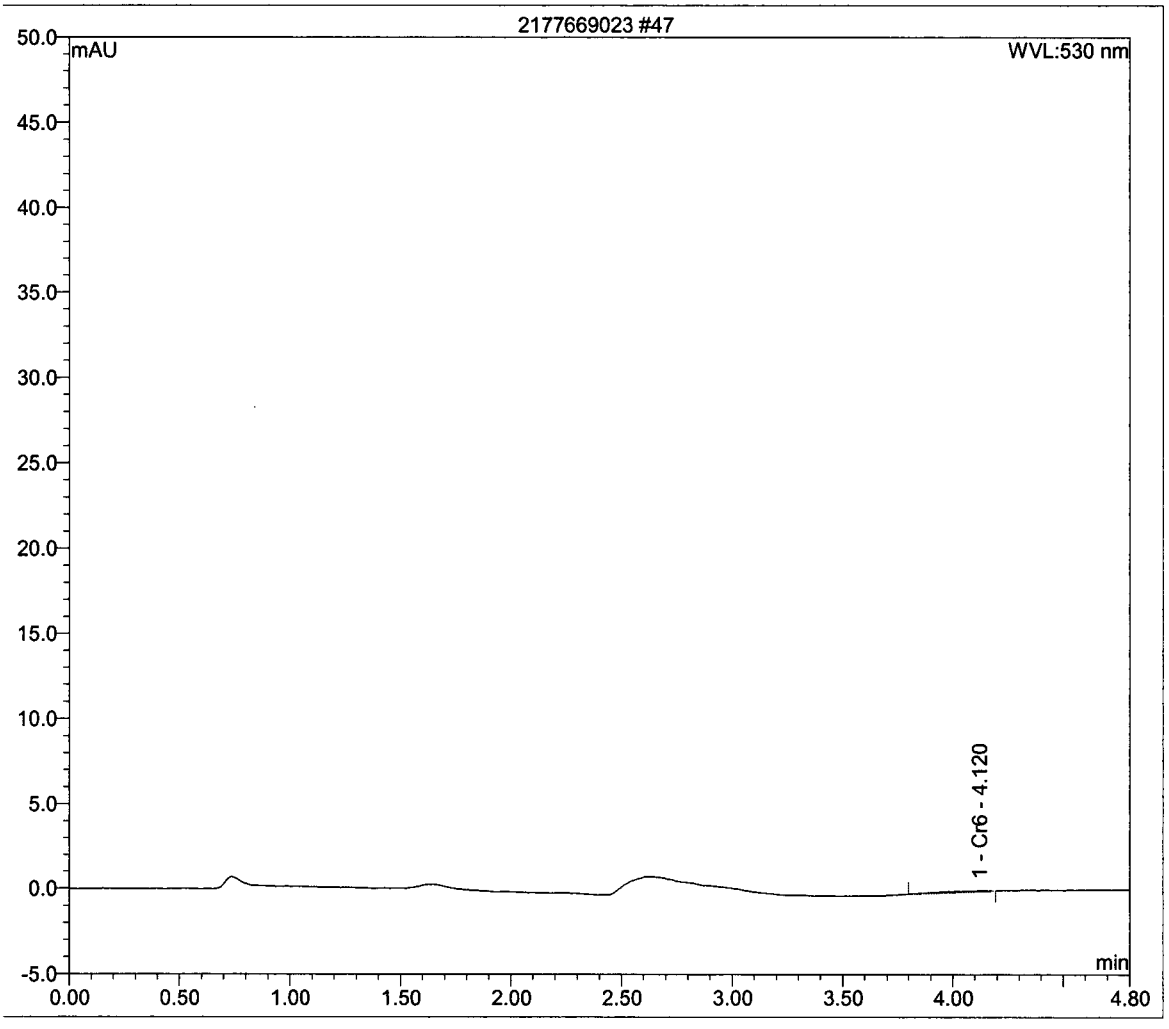
No.	Pos.	Name	*DilutionFactor	*SampleType	Comment	Program	Method	*Analyst	*Batch
42	42	2414779	1	LCS	QCS	cr+6	218_6_092716	MBW	176648
43	43	2177669021	1	SAMPLE		cr+6	218_6_092716	MBW	176648
44	44	2414780	1	MS		cr+6	218_6_092716	MBW	176648
45	45	2414781	1	MSD		cr+6	218_6_092716	MBW	176648
46	46	2177669022	1	SAMPLE		cr+6	218_6_092716	MBW	176648
47	47	2177669023	1	SAMPLE		cr+6	218_6_092716	MBW	176648
48	48	2177669024	1	SAMPLE		cr+6	218_6_092716	MBW	176648
49	49	2177669025	1	SAMPLE		cr+6	218_6_092716	MBW	176648
50	50	2177669026	1	SAMPLE		cr+6	218_6_092716	MBW	176648
51	1	2177669027	1	SAMPLE		cr+6	218_6_092716	MBW	176648
52	2	2177669028	1	SAMPLE		cr+6	218_6_092716	MBW	176648
53	3	2177669029	1	SAMPLE		cr+6	218_6_092716	MBW	176648
54	4	2177669030	1	SAMPLE		cr+6	218_6_092716	MBW	176648
55	5	2177669030DUP	1	DUP		cr+6	218_6_092716	MBW	176648
56	6	2414782	1	CCVH		cr+6	218_6_092716	MBW	176648
57	7	2414783	1	MB		cr+6	218_6_092716	MBW	176648
58	8	2177669001	1	SAMPLE		cr+6	218_6_092716	MBW	176648
59	9	2414770	1	MS		cr+6	218_6_092716	MBW	176648
60	10	2414771	1	MSD		cr+6	218_6_092716	MBW	176648
61	11	2177669002	1	SAMPLE		cr+6	218_6_092716	MBW	176648
62	12	2177669003	1	SAMPLE		cr+6	218_6_092716	MBW	176648
63	13	2177669004	1	SAMPLE		cr+6	218_6_092716	MBW	176648
64	14	2177669005	1	SAMPLE		cr+6	218_6_092716	MBW	176648
65	15	2177669006	1	SAMPLE		cr+6	218_6_092716	MBW	176648
66	16	2177669006DUP	1	DUP		cr+6	218_6_092716	MBW	176648
67	17	2414786	1	CCVL		cr+6	218_6_092716	MBW	176648
68	18	2414787	1	MB		cr+6	218_6_092716	MBW	176648
69	19	SHUTDOWN		MISC		shutdownCR6	218_6_092716	MBW	176648

Sample Calc
MSA-SW42C-092616
Result: 12 ug/L

Peak Integration Report

Sample Name:	**2177669023**	*Dilution Factor:*	**1**
Sample Type:	**SAMPLE**	*Analyst:*	**MBW**
Program:		*Queue:*	**WETC**
Inj. Date/Time:	**09/27/16 07:52**	*Batch:*	**176648**
Instrument:	**IC-4**	*Comment:*	
Sequence1:	**092716**	*InitialCal:*	**092716**
Sequence2:		*Method:*	**218_6_092716**

No.	Time min	Peak Name	Area mAU*min	Height mAU	Amount
1	4.12	Cr6	0.017	0.049	0.120
		TOTAL:	0.02	0.05	0.12



Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Final pH 9-9.5, SI units	0.4 µm Filtered
2177669001	Cr+6 Buffer	X	Y
2177669002	Cr+6 Buffer	X	Y
2177669003	Cr+6 Buffer	X	Y
2177669004	Cr+6 Buffer	X	Y
2177669005	Cr+6 Buffer	X	Y
2177669006	Cr+6 Buffer	X	Y
2177669007	Cr+6 Buffer	X	Y
2177669008	Cr+6 Buffer	X	Y
2177669009	Cr+6 Buffer	X	Y
2177669010	Cr+6 Buffer	X	Y
2177669011	Cr+6 Buffer	X	Y
2177669012	Cr+6 Buffer	X	Y
2177669013	Cr+6 Buffer	X	Y
2177669014	Cr+6 Buffer	X	Y
2177669015	Cr+6 Buffer	X	Y
2177669016	Cr+6 Buffer	X	Y
2177669017	Cr+6 Buffer	X	Y
2177669018	Cr+6 Buffer	X	Y
2177669019	Cr+6 Buffer	X	Y
2177669020	Cr+6 Buffer	X	Y

Date:	9.27.2016
Tech:	MBW

Queue:	WETC
Batch:	176647

Reagent:	
Cr+6 Buffer:	WR160927005

Reviewed by:	
Reviewed date:	

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
2177669021	Cr+6 Buffer	X	Y
2177669022	Cr+6 Buffer	X	Y
2177669023	Cr+6 Buffer	X	Y
2177669024	Cr+6 Buffer	X	Y
2177669025	Cr+6 Buffer	X	Y
2177669026	Cr+6 Buffer	X	Y
2177669027	Cr+6 Buffer	X	Y
2177669028	Cr+6 Buffer	X	Y
2177669029	Cr+6 Buffer	X	Y
2177669030	Cr+6 Buffer	X	Y
2177669031	Cr+6 Buffer	X	Y
2177669032	Cr+6 Buffer	X	Y
2177669033	Cr+6 Buffer	X	Y
2177669034	Cr+6 Buffer	X	Y
2177669035	Cr+6 Buffer	X	Y
2177669036	Cr+6 Buffer	X	Y

Date:	9.27.2016
Tech:	MBW

Queue:	WETC
Batch:	176648

Reagent:	
Cr+6 Buffer:	WR160927005

Reviewed by:	
Reviewed date:	

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.

APPENDIX C—CHEMICAL-RESULTS DATA TABLE

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-092616 20160926	EL-SW01B EL-SW01B-092616 20160926	EL-SW01C EL-SW01C-092616 20160926	EL-SW01D EL-SW01D-092616 20160926	MSA-SW37A MSA-SW37A-092616 20160926	MSA-SW37B MSA-SW37B-092616 20160926
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	NA	NA	NA	NA	0.45 UJ	0.45 UJ
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 UJ	0.44 UJ
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 UJ	0.82 UJ
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	0.94 U	0.94 J	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	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 UJ	0.56 UJ
BROMOMETHANE	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 U	0.44 U
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	NA	NA	NA	NA	1 UJ	1 UJ

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-092616 20160926	EL-SW01B EL-SW01B-092616 20160926	EL-SW01C EL-SW01C-092616 20160926	EL-SW01D EL-SW01D-092616 20160926	MSA-SW37A MSA-SW37A-092616 20160926	MSA-SW37B MSA-SW37B-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	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	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	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	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 U	4.9 U	4.9 U	4.9 U	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	0.31 J	0.28 J	0.3 J	0.25 J	0.22 U	0.22 U
TRICHLOROFLUOROMETHANE	0.49 UJ	0.49 UJ	0.49 UJ	0.49 UJ	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	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Volatile organic compound tentatively identified compounds (µg/L)						
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-092616 20160926	EL-SW01B EL-SW01B-092616 20160926	EL-SW01C EL-SW01C-092616 20160926	EL-SW01D EL-SW01D-092616 20160926	MSA-SW37A MSA-SW37A-092616 20160926	MSA-SW37B MSA-SW37B-092616 20160926
Dissolved metals (µg/L)						
ANTIMONY	NA	NA	NA	NA	1.4 U	1.4 U
ARSENIC	NA	NA	NA	NA	1.9 J	2.4 J
BARIUM	NA	NA	NA	NA	52	55
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	0.65 U	0.65 U
COPPER	NA	NA	NA	NA	3.9 J	4.5 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	3 J	3.1 J
NICKEL	NA	NA	NA	NA	2.1 J	2.8 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	4.5 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 (mg/L)						
CALCIUM HARDNESS AS CaCO3	NA	NA	NA	NA	200	210
HARDNESS AS CaCO3	NA	NA	NA	NA	1200	1300
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA	NA	1000	1000
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	0.052 UJ	0.052 U

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW37C	MSA-SW37D	MSA-SW38A	MSA-SW38B	MSA-SW38C	MSA-SW38D
SAMPLE ID	MSA-SW37C-092616	MSA-SW37D-092616	MSA-SW38A-092616	MSA-SW38B-092616	MSA-SW38C-092616	MSA-SW38D-092616
SAMPLE DATE	20160926	20160926	20160926	20160926	20160926	20160926
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 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.45 UJ
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 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
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 UJ	0.82 UJ	0.82 UJ	0.82 UJ	0.82 UJ	0.82 UJ
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	0.94 U	0.94 U	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	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 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ
BROMOMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
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-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW37C MSA-SW37C-092616 20160926	MSA-SW37D MSA-SW37D-092616 20160926	MSA-SW38A MSA-SW38A-092616 20160926	MSA-SW38B MSA-SW38B-092616 20160926	MSA-SW38C MSA-SW38C-092616 20160926	MSA-SW38D MSA-SW38D-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	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	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	7.6	4.2	2.6	1
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	0.22 U	0.22 U	5.5	4	3.9	1.5
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	0.29 U	0.29 U	4.5	2.7	1.2	0.38 J
Volatile organic compound tentatively ic						
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	2 NJ
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	2.1 R	2.2 R	2 R	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW37C MSA-SW37C-092616 20160926	MSA-SW37D MSA-SW37D-092616 20160926	MSA-SW38A MSA-SW38A-092616 20160926	MSA-SW38B MSA-SW38B-092616 20160926	MSA-SW38C MSA-SW38C-092616 20160926	MSA-SW38D MSA-SW38D-092616 20160926
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	2.2 J	2.4 J	1.9 J	1.8 J	1.8 J	2 J
BARIUM	52	57	53	50	52	53
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 J	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.65 U	0.65 U	0.89 U	0.65 U	0.65 U	0.65 U
COPPER	4.9 J	5.8 J	3.1 J	3.3 J	3.4 J	4.3 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	3 J	3.2 J	2.7 J	2.7 J	2.8 J	2.9 J
NICKEL	3 J	3 J	2.9 J	2.8 J	2.8 J	2.6 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	370
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS CaCO3	210	220	210	210	210	210
HARDNESS AS CaCO3	1200	1300	1300	1200	1200	1300
MAGNESIUM HARDNESS AS CaCO3	1000	1100	1000	1000	1000	1100
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW39A MSA-SW39A-092616 20160926	MSA-SW39B MSA-SW39B-092616 20160926	MSA-SW39C MSA-SW39C-092616 20160926	MSA-SW39D MSA-SW39D-092616 20160926	MSA-SW40A MSA-SW40A-092616 20160926	MSA-SW40B MSA-SW40B-092616 20160926
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 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.45 UJ
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 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
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 UJ	0.82 UJ	0.82 UJ	0.82 UJ	0.82 UJ	0.82 UJ
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	0.94 U	0.94 U	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	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 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ
BROMOMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
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-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW39A MSA-SW39A-092616 20160926	MSA-SW39B MSA-SW39B-092616 20160926	MSA-SW39C MSA-SW39C-092616 20160926	MSA-SW39D MSA-SW39D-092616 20160926	MSA-SW40A MSA-SW40A-092616 20160926	MSA-SW40B MSA-SW40B-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	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	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	0.29 J	0.26 J	0.27 J	1.9	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 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	0.23 J	0.33 J	0.29 J	0.28 J	2.9	4.2
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	0.29 U	0.29 U	0.29 U	0.29 U	0.77	0.83
Volatile organic compound tentatively ic						
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	2.9 R	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	2.4 R

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW39A MSA-SW39A-092616 20160926	MSA-SW39B MSA-SW39B-092616 20160926	MSA-SW39C MSA-SW39C-092616 20160926	MSA-SW39D MSA-SW39D-092616 20160926	MSA-SW40A MSA-SW40A-092616 20160926	MSA-SW40B MSA-SW40B-092616 20160926
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 U	1.8 U	1.8 U	1.8 J	2 J	1.8 J
BARIUM	53	54	56	54	57	55
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	1.9 J	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	3.6 J	7.3 J	3.2 J	4.1 J	4.1 J	4.1 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	2.8 J	2.9 J	2.7 J	2.9 J	3 J	2.8 J
NICKEL	2.5 J	3.4 J	2.8 J	3.5 J	3.1 J	3.3 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	39 J	31 U	31 U	31 U	31 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS CaCO3	210	210	210	220	220	220
HARDNESS AS CaCO3	1300	1300	1300	1300	1300	1300
MAGNESIUM HARDNESS AS CaCO3	1100	1000	1100	1100	1100	1100
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 UJ	0.052 U	0.052 U	0.052 U

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW40C	MSA-SW40D	MSA-SW41A	MSA-SW41B	MSA-SW41C	MSA-SW41D
SAMPLE ID	MSA-SW40C-092616	MSA-SW40D-092616	MSA-SW41A-092616	MSA-SW41B-092616	MSA-SW41C-092616	MSA-SW41D-092616
SAMPLE DATE	20160926	20160926	20160926	20160926	20160926	20160926
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 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.45 UJ
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 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ	0.44 UJ
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 UJ	0.82 UJ	0.82 UJ	0.82 UJ	0.82 UJ	0.82 UJ
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	0.94 U	0.94 U	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	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 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ
BROMOMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
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-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW40C MSA-SW40C-092616 20160926	MSA-SW40D MSA-SW40D-092616 20160926	MSA-SW41A MSA-SW41A-092616 20160926	MSA-SW41B MSA-SW41B-092616 20160926	MSA-SW41C MSA-SW41C-092616 20160926	MSA-SW41D MSA-SW41D-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	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	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	6.7	1.2	5.7	3.9	1.6	0.58 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	0.25 J	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	18	2.3	4.2	3.3	1.5	0.75 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	2.1	0.39 J	2.8	1.7	0.7	0.29 U
Volatile organic compound tentatively ic						
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	3.3 R	NA	NA	2.8 R	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	2.3 R	NA	2.1 R	2.5 R	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW40C MSA-SW40C-092616 20160926	MSA-SW40D MSA-SW40D-092616 20160926	MSA-SW41A MSA-SW41A-092616 20160926	MSA-SW41B MSA-SW41B-092616 20160926	MSA-SW41C MSA-SW41C-092616 20160926	MSA-SW41D MSA-SW41D-092616 20160926
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 J	1.8 U	1.8 U	1.8 J	1.9 J
BARIUM	57	54	53	52	54	53
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	1 J	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	4.4 J	6.3 J	3.7 J	3.6 J	4.2 J	5.5 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	2.8 J	2.8 J	2.8 J	2.7 J	2.7 J	2.7 J
NICKEL	3.1 J	2.9 J	2.4 J	2.2 J	2.3 J	2.6 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 (mg/L)						
CALCIUM HARDNESS AS CaCO3	220	210	210	200	200	210
HARDNESS AS CaCO3	1300	1300	1200	1200	1200	1300
MAGNESIUM HARDNESS AS CaCO3	1100	1100	1000	1000	1000	1000
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW42A MSA-SW42A-092616 20160926	MSA-SW42B MSA-SW42B-092616 20160926	MSA-SW42C MSA-SW42C-092616 20160926	MSA-SW42D MSA-SW42D-092616 20160926	MSA-SW43A MSA-SW43A-092616 20160926	MSA-SW43B MSA-SW43B-092616 20160926
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	0.94 U	0.94 U	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	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 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
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-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW42A MSA-SW42A-092616 20160926	MSA-SW42B MSA-SW42B-092616 20160926	MSA-SW42C MSA-SW42C-092616 20160926	MSA-SW42D MSA-SW42D-092616 20160926	MSA-SW43A MSA-SW43A-092616 20160926	MSA-SW43B MSA-SW43B-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	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	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	0.71 J	0.99 J	0.72 J	0.38 J	2.3	1.7
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 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	0.23 J	0.23 J	0.25 J	0.3 J	1.7	1.3
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	0.96	1.6	1.1	0.34 J	0.52	0.36 J
Volatile organic compound tentatively ic						
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA	NA	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW42A MSA-SW42A-092616 20160926	MSA-SW42B MSA-SW42B-092616 20160926	MSA-SW42C MSA-SW42C-092616 20160926	MSA-SW42D MSA-SW42D-092616 20160926	MSA-SW43A MSA-SW43A-092616 20160926	MSA-SW43B MSA-SW43B-092616 20160926
Dissolved metals (µg/L)						
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
ARSENIC	2.9 J	2.5 J	1.8 U	1.8 J	1.8 U	1.9 J
BARIUM	64	61	55	55	58	57
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	1.6 U	1.7 U	1.3 U	1.3 U	1.3 U	1.3 U
COBALT	0.99 J	0.8 J	0.65 U	0.65 U	0.65 U	0.65 U
COPPER	4.5 U	4.4 U	3.9 U	4.1 U	5.5 U	4.9 U
LEAD	1 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	4 J	3.2 J	2.7 J	2.9 J	3.1 J	2.9 J
NICKEL	3.5 J	3.6 J	2.8 J	2.6 J	2.7 J	2.7 J
SELENIUM	2.9 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 (mg/L)						
CALCIUM HARDNESS AS CaCO3	230	230	210	210	230	230
HARDNESS AS CaCO3	1400	1400	1300	1300	1400	1400
MAGNESIUM HARDNESS AS CaCO3	1100	1100	1000	1000	1100	1200
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 UJ	0.052 U	0.12 J	0.052 U	0.052 U	0.052 U

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW43C	MSA-SW43D	MSA-SW44A	MSA-SW44B	MSA-SW44C	MSA-SW44D
SAMPLE ID	MSA-SW43C-092616	MSA-SW43D-092616	MSA-SW44A-092616	MSA-SW44B-092616	MSA-SW44C-092616	MSA-SW44D-092616
SAMPLE DATE	20160926	20160926	20160926	20160926	20160926	20160926
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	0.94 U	0.94 U	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	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 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
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-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW43C MSA-SW43C-092616 20160926	MSA-SW43D MSA-SW43D-092616 20160926	MSA-SW44A MSA-SW44A-092616 20160926	MSA-SW44B MSA-SW44B-092616 20160926	MSA-SW44C MSA-SW44C-092616 20160926	MSA-SW44D MSA-SW44D-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	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	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	0.78 J	0.84 J	1.5	2.1	0.52 J	0.33 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	0.24 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	0.69 J	0.79 J	1.2	1.6	0.54 J	0.38 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	0.29 U	0.29 U	0.42 J	0.55	0.29 U	0.29 U
Volatile organic compound tentatively ic						
ETHANETHIOAMIDE	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	2.1 R	2.4 R	2.4 R	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW43C MSA-SW43C-092616 20160926	MSA-SW43D MSA-SW43D-092616 20160926	MSA-SW44A MSA-SW44A-092616 20160926	MSA-SW44B MSA-SW44B-092616 20160926	MSA-SW44C MSA-SW44C-092616 20160926	MSA-SW44D MSA-SW44D-092616 20160926
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 J	1.8 U	1.8 U	1.9 J	1.8 J
BARIUM	57	58	52	56	56	54
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	4.1 U	5.4 U	3.5 U	3.9 U	4.9 U	4.3 U
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	3.2 J	3 J	2.9 J	2.9 J	2.8 J	2.9 J
NICKEL	2.9 J	2.5 J	2.8 J	3.2 J	3.2 J	2.6 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	32 U
Miscellaneous parameters (mg/L)						
CALCIUM HARDNESS AS CaCO3	230	230	210	220	220	210
HARDNESS AS CaCO3	1400	1400	1300	1300	1300	1300
MAGNESIUM HARDNESS AS CaCO3	1100	1100	1100	1100	1100	1100
Miscellaneous parameters (µg/L)						
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U	0.052 U

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW45A MSA-SW45A-092616 20160926	MSA-SW45B MSA-SW45B-092616 20160926	MSA-SW45C MSA-SW45C-092616 20160926	MSA-SW45D MSA-SW45D-092616 20160926	MSA-SW46A MSA-SW46A-092616 20160926
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
1,1,1-TRICHLOROETHANE	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
1,1,2-TRICHLOROTRIFLUOROETHANE	0.45 U	0.45 U	0.45 U	0.45 U	NA
1,1-DICHLOROETHANE	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
1,1-DICHLOROPROPENE	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
1,2,3-TRICHLOROPROPANE	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
1,2,4-TRICHLOROBENZENE	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
1,2-DIBROMO-3-CHLOROPROPANE	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
1,2-DICHLOROBENZENE	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
1,2-DICHLOROPROPANE	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
1,3-DICHLOROPROPANE	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
2,2-DICHLOROPROPANE	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
2-CHLOROETHYL VINYL ETHER	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
2-HEXANONE	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
4-ISOPROPYLTOLUENE	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
ACETONE	0.94 U	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	0.35 U
BROMOBENZENE	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
BROMODICHLOROMETHANE	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
BROMOMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CARBON DISULFIDE	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
CHLOROBENZENE	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
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW45A MSA-SW45A-092616 20160926	MSA-SW45B MSA-SW45B-092616 20160926	MSA-SW45C MSA-SW45C-092616 20160926	MSA-SW45D MSA-SW45D-092616 20160926	MSA-SW46A MSA-SW46A-092616 20160926
CHLOROETHANE	0.32 U	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	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	0.34 J	0.28 J	0.26 U	0.26 U	0.54 J
CIS-1,3-DICHLOROPROPENE	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
DICHLORODIFLUOROMETHANE	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
ETHYL TERT-BUTYL ETHER	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
HEXACHLOROBUTADIENE	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
M+P-XYLENES	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
METHYLENE CHLORIDE	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
N-BUTYLBENZENE	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
O-XYLENE	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
STYRENE	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
TERT-BUTYLBENZENE	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
TETRACHLOROETHENE	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
TOTAL XYLENES	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
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	0.43 J	0.33 J	0.26 J	0.28 J	0.22 J
TRICHLOROFLUOROMETHANE	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
VINYL CHLORIDE	0.29 U	0.29 U	0.29 U	0.29 U	0.65
Volatile organic compound tentatively ic					
ETHANETHIOAMIDE	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA	NA	NA
SILANOL, TRIMETHYL-	NA	2.4 R	NA	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW45A MSA-SW45A-092616 20160926	MSA-SW45B MSA-SW45B-092616 20160926	MSA-SW45C MSA-SW45C-092616 20160926	MSA-SW45D MSA-SW45D-092616 20160926	MSA-SW46A MSA-SW46A-092616 20160926
Dissolved metals (µg/L)					
ANTIMONY	1.4 U	1.4 U	1.4 U	1.4 U	NA
ARSENIC	1.8 U	1.8 J	1.9 J	2 J	NA
BARIUM	56	52	57	56	NA
BERYLLIUM	2 U	2 U	2 U	2 U	NA
CADMIUM	1.6 U	1.6 U	1.6 U	1.6 U	NA
CHROMIUM	1.3 U	1.6 U	1.3 U	1.3 U	NA
COBALT	0.65 U	0.65 U	0.65 U	0.65 U	NA
COPPER	6 U	14	4.2 U	5.3 U	NA
LEAD	0.8 U	0.8 U	0.8 U	0.8 U	NA
MERCURY	0.09 U	0.09 U	0.09 U	0.09 U	NA
MOLYBDENUM	3 J	3 J	3 J	3 J	NA
NICKEL	3.1 J	3 J	2.6 J	2.8 J	NA
SELENIUM	2.4 U	2.4 U	2.4 U	2.4 U	NA
SILVER	0.15 U	0.15 U	0.15 U	0.15 U	NA
THALLIUM	1.4 U	1.4 U	1.4 U	1.4 U	NA
TUNGSTEN	4.5 U	4.5 U	4.5 U	4.5 U	NA
VANADIUM	2.7 U	2.7 U	2.7 U	2.7 U	NA
ZINC	31 U	31 U	31 U	31 U	NA
Miscellaneous parameters (mg/L)					
CALCIUM HARDNESS AS CaCO3	220	210	220	220	NA
HARDNESS AS CaCO3	1300	1300	1300	1300	NA
MAGNESIUM HARDNESS AS CaCO3	1100	1100	1100	1100	NA
Miscellaneous parameters (µg/L)					
HEXAVALENT CHROMIUM	0.052 U	0.052 U	0.052 U	0.052 U	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW47A	MSA-SW48A	MSA-SW49A
SAMPLE ID	MSA-SW47A-092616	MSA-SW48A-092616	MSA-SW49A-092616
SAMPLE DATE	20160926	20160926	20160926
Volatile organic compounds (µg/L)			
1,1,1,2-TETRACHLOROETHANE	0.28 U	0.28 U	0.28 U
1,1,1-TRICHLOROETHANE	0.44 U	0.44 U	0.44 U
1,1,2,2-TETRACHLOROETHANE	0.22 U	0.22 U	0.22 U
1,1,2-TRICHLOROTRIFLUOROETHANE	NA	NA	NA
1,1-DICHLOROETHANE	0.3 U	0.3 U	0.3 U
1,1-DICHLOROETHENE	0.45 U	0.45 U	0.45 U
1,1-DICHLOROPROPENE	0.42 U	0.42 U	0.42 U
1,2,3-TRICHLOROBENZENE	0.37 U	0.37 U	0.37 U
1,2,3-TRICHLOROPROPANE	0.44 U	0.44 U	0.44 U
1,2,3-TRIMETHYLBENZENE	0.47 U	0.47 U	0.47 U
1,2,4-TRICHLOROBENZENE	0.32 U	0.32 U	0.32 U
1,2,4-TRIMETHYLBENZENE	0.41 U	0.41 U	0.41 U
1,2-DIBROMO-3-CHLOROPROPANE	0.82 U	0.82 U	0.82 U
1,2-DIBROMOETHANE	0.32 U	0.32 U	0.32 U
1,2-DICHLOROBENZENE	0.25 U	0.25 U	0.25 U
1,2-DICHLOROETHANE	0.23 U	0.23 U	0.23 U
1,2-DICHLOROPROPANE	0.25 U	0.25 U	0.25 U
1,3-DICHLOROBENZENE	0.19 U	0.19 U	0.19 U
1,3-DICHLOROPROPANE	0.19 U	0.19 U	0.19 U
1,4-DICHLOROBENZENE	0.27 U	0.4 J	0.27 U
2,2-DICHLOROPROPANE	0.26 U	0.26 U	0.26 U
2-BUTANONE	0.53 U	0.53 U	0.53 U
2-CHLOROETHYL VINYL ETHER	0.59 UR	0.59 UR	0.59 UR
2-CHLOROTOLUENE	0.4 U	0.4 U	0.4 U
2-HEXANONE	0.48 U	0.48 U	0.48 U
4-CHLOROTOLUENE	0.29 U	0.29 U	0.29 U
4-ISOPROPYLTOLUENE	0.43 U	0.43 U	0.43 U
4-METHYL-2-PENTANONE	0.99 U	0.99 U	0.99 U
ACETONE	0.94 U	0.94 U	0.94 U
BENZENE	0.35 U	0.35 U	0.35 U
BROMOBENZENE	0.35 U	0.35 U	0.35 U
BROMOCHLOROMETHANE	0.5 U	0.5 U	0.5 U
BROMODICHLOROMETHANE	0.29 U	0.29 U	0.29 U
BROMOFORM	0.56 U	0.56 U	0.56 U
BROMOMETHANE	0.44 U	0.44 U	0.44 U
CARBON DISULFIDE	0.38 U	0.38 U	0.38 U
CARBON TETRACHLORIDE	0.43 U	0.43 U	0.43 U
CHLOROBENZENE	0.25 U	0.25 U	0.25 U
CHLORODIBROMOMETHANE	0.43 U	0.43 U	0.43 U
CHLORODIFLUOROMETHANE	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW47A MSA-SW47A-092616 20160926	MSA-SW48A MSA-SW48A-092616 20160926	MSA-SW49A MSA-SW49A-092616 20160926
CHLOROETHANE	0.32 U	0.32 U	0.32 U
CHLOROFORM	0.25 U	0.25 U	0.25 U
CHLOROMETHANE	0.44 U	0.44 U	0.44 U
CIS-1,2-DICHLOROETHENE	2.7	5.3	4.5
CIS-1,3-DICHLOROPROPENE	0.46 U	0.46 U	0.46 U
DIBROMOMETHANE	0.42 U	0.42 U	0.42 U
DICHLORODIFLUOROMETHANE	0.32 U	0.32 U	0.32 U
DIISOPROPYL ETHER	0.5 U	0.5 U	0.5 U
ETHYL TERT-BUTYL ETHER	0.23 U	0.23 U	0.23 U
ETHYLBENZENE	0.25 U	0.25 U	0.25 U
HEXACHLOROBUTADIENE	0.35 U	0.35 U	0.35 U
ISOPROPYLBENZENE	0.35 U	0.35 U	0.35 U
M+P-XYLENES	0.24 U	1.5 J	0.24 U
METHYL TERT-BUTYL ETHER	0.2 U	0.2 U	0.2 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.45 U	0.45 U	0.45 U
N-BUTYLBENZENE	0.31 U	0.31 U	0.31 U
N-PROPYLBENZENE	0.4 U	0.4 U	0.4 U
O-XYLENE	0.25 U	0.32 J	0.25 U
SEC-BUTYLBENZENE	0.48 U	0.48 U	0.48 U
STYRENE	0.45 U	0.45 U	0.45 U
TERT-AMYL METHYL ETHER	0.3 U	0.3 U	0.3 U
TERT-BUTYLBENZENE	0.41 U	0.41 U	0.41 U
TERTIARY-BUTYL ALCOHOL	4.9 U	4.9 U	4.9 U
TETRACHLOROETHENE	0.31 U	0.31 U	0.31 U
TOLUENE	0.23 U	0.23 U	0.23 U
TOTAL XYLENES	0.52 U	1.8 J	0.52 U
TRANS-1,2-DICHLOROETHENE	0.3 U	0.3 U	0.3 U
TRANS-1,3-DICHLOROPROPENE	0.56 U	0.56 U	0.56 U
TRICHLOROETHENE	4.5	3.8	3.6
TRICHLOROFLUOROMETHANE	0.49 U	0.49 U	0.49 U
VINYL ACETATE	0.41 U	0.41 U	0.41 U
VINYL CHLORIDE	1.1	3.3	2.1
Volatile organic compound tentatively id			
ETHANETHIOAMIDE	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)	NA	NA	NA
SILANOL, DIMETHYL(1,1,2-TRIMETHYLPROPYL)-	NA	NA	NA
SILANOL, TRIMETHYL-	NA	NA	NA
TERT-BUTYLDIMETHYLSILANOL	NA	NA	NA

Table C-1
Chemical Results for Surface Water Samples-September 2016
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW47A	MSA-SW48A	MSA-SW49A
SAMPLE ID	MSA-SW47A-092616	MSA-SW48A-092616	MSA-SW49A-092616
SAMPLE DATE	20160926	20160926	20160926
Dissolved metals (µg/L)			
ANTIMONY	NA	NA	NA
ARSENIC	NA	NA	NA
BARIUM	NA	NA	NA
BERYLLIUM	NA	NA	NA
CADMIUM	NA	NA	NA
CHROMIUM	NA	NA	NA
COBALT	NA	NA	NA
COPPER	NA	NA	NA
LEAD	NA	NA	NA
MERCURY	NA	NA	NA
MOLYBDENUM	NA	NA	NA
NICKEL	NA	NA	NA
SELENIUM	NA	NA	NA
SILVER	NA	NA	NA
THALLIUM	NA	NA	NA
TUNGSTEN	NA	NA	NA
VANADIUM	NA	NA	NA
ZINC	NA	NA	NA
Miscellaneous parameters (mg/L)			
CALCIUM HARDNESS AS CaCO3	NA	NA	NA
HARDNESS AS CaCO3	NA	NA	NA
MAGNESIUM HARDNESS AS CaCO3	NA	NA	NA
Miscellaneous parameters (µg/L)			
HEXAVALENT CHROMIUM	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
R - result not reliable
U - not detected at the concentration left of the letter
UJ - not detected. Result is estimated.
UR - not detected. Result not reliable.