Technical Memorandum: August 2014 Surface Water Sampling Results for Frog Mortar Creek, Martin State Airport 701 Wilson Point Road Middle River, Maryland

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ACRONYMS

AWQC	ambient water quality criteria
BTAG	Biological Technical Advisory Group
BTEX	benzene, toluene, ethylbenzene, and xylenes
cis-1,2-DCE	*cis*-1,2-dichloroethene
COMAR	*Code of Maryland Regulations*
cVOC	chlorinated volatile organic compound
DRA	Dump Road Area
EL	Edwards Lane
GIS	geographic information system
IDW	investigation-derived waste
Lockheed Martin	Lockheed Martin Corporation
MDANG	Maryland Air National Guard
MDE	Maryland Department of the Environment
mg/L	milligram(s) per liter
MSA	Martin State Airport
µg/L	microgram(s) per liter
NRWQC	national recommended water quality criteria
PDF	portable document format
PPE	personal protective equipment
SVOC	semivolatile organic compound
TCE	trichloroethene (also known as trichloroethylene)
TB	trip blank
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 analytical results for surface water samples collected from 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 samples were collected at 40 locations in Frog Mortar Creek on August 5, 2014, and submitted to an off-site laboratory for chemical analyses in accordance with the *2014 Surface Water Sampling Work Plan* (Tetra Tech, 2014a). The results are then compared herein to screening levels intended to protect human health and the environment. 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. These data will be used in future efforts to:

- evaluate the interaction between Dump Road Area shallow groundwater and Frog Mortar Creek
- provide information to assess human health risks for recreational users of Frog Mortar Creek
- provide information to update modeling of shallow-groundwater flow patterns and 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 investigation results.

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

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

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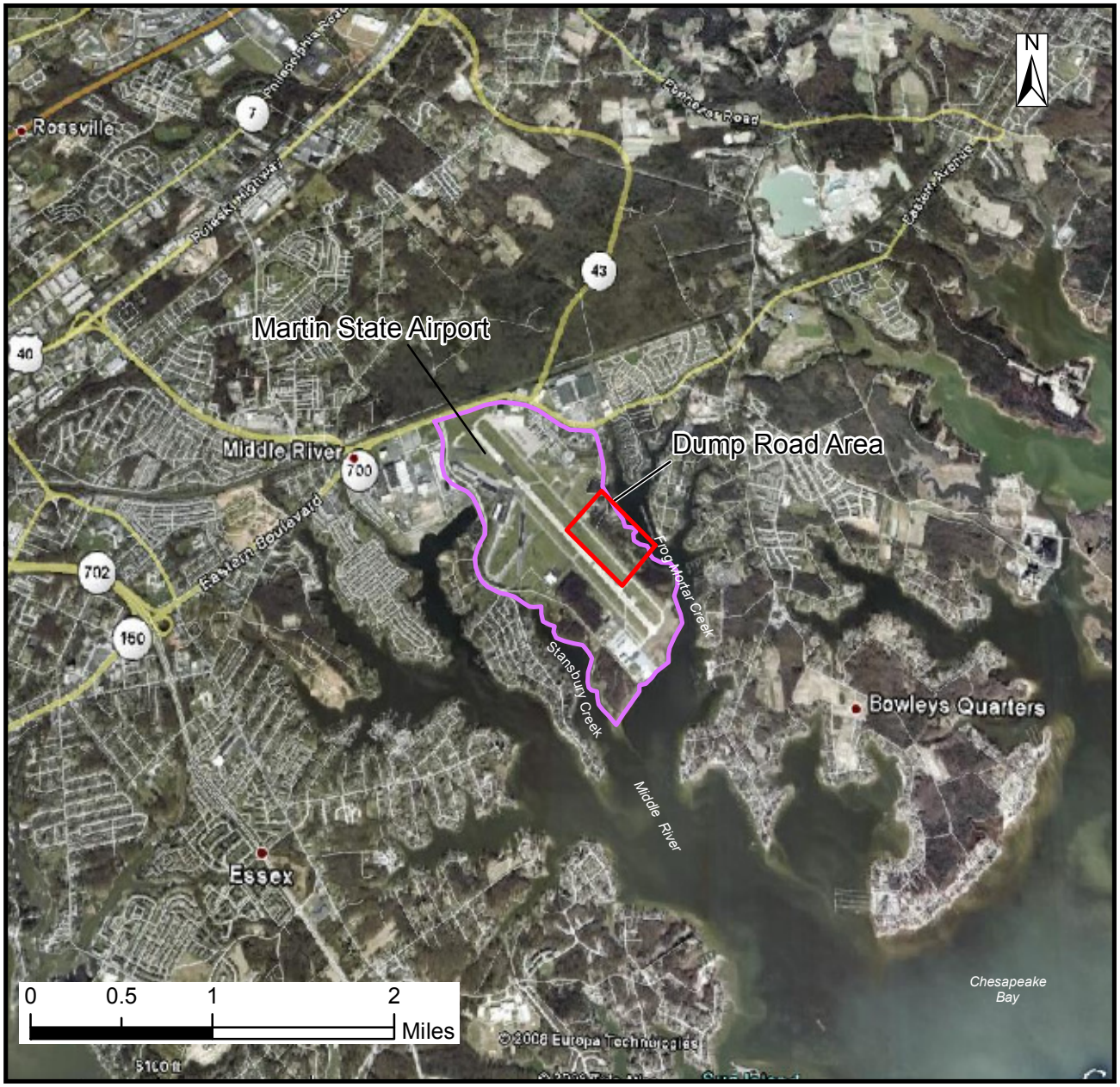

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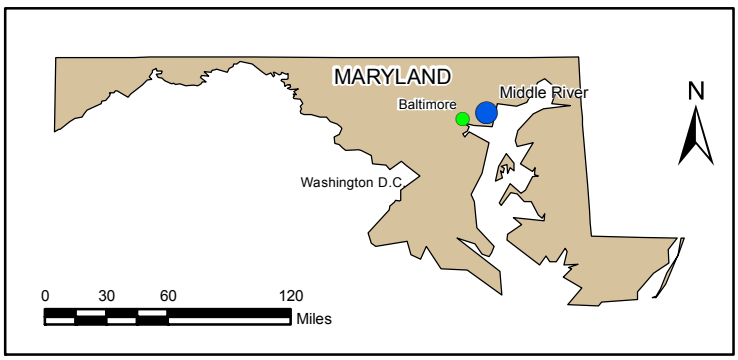

FIGURE 1-1

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

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

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Section 2
Site Background and Previous Investigations

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland. It 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) at MSA (Figures 2-1 and 2-2).

Environmental studies have been conducted at the DRA since 1991, when the Maryland Aviation Administration removed drums discovered near Taxiway Tango (Figure 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 used by MDANG and by state-owned and private aircraft.

Previous environmental studies at MSA demonstrate that soil, pond sediment, and groundwater at the DRA have been impacted by volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals resulting from historical dumping and backfilling. Chlorinated VOCs (cVOCs), including trichloroethene (TCE; also known as trichloroethylene), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC); petroleum-related VOCs such as benzene, toluene, ethylbenzene, and xylenes (BTEX); and several metals have been detected in DRA groundwater at concentrations exceeding state groundwater standards.

Frog Mortar Creek is hydraulically downgradient of the DRA and receives groundwater discharging from the DRA. TCE, *cis*-1,2-DCE, VC, benzene, toluene, xylenes, 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. Summaries of studies conducted at Frog Mortar Creek from 1997–2013, and details of the area's physical setting, land use, physiography, and surface/subsurface conditions (i.e., soils, hydrology, and geology) are in the *2013 Surface Water Sampling Report for Frog Mortar Creek* (Tetra Tech, 2014b), and are therefore not repeated herein.



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

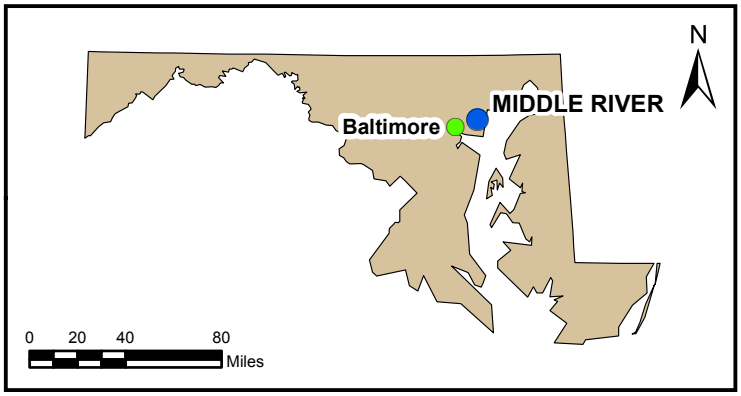

FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

Lockheed Martin, Martin State Airport
Middle River, Maryland

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FIGURE 2-2

SITE FEATURES AND AREAS OF CONCERN
DUMP ROAD AREA

LEGEND

- GROUNDWATER MONITORING WELL (MW) AND PIEZOMETER (PZ), 1994 - 1996
- OUTLINE OF FORMER COVE
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- EARTHEN BERM
- EXTENT OF UNSATURATED CONTAMINATED SOIL AND LANDFILL MATERIAL
- POND

Lockheed Martin, Martin State Airport
Middle River, Maryland

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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; also known as trichloroethylene), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) 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 chemical concentrations with respect to United States Environmental Protection Agency (USEPA) or Maryland screening levels for these constituents. These screening criteria include USEPA national recommended water quality criteria (NRWQC), Maryland ambient water quality criteria (AWQC), USEPA Biological Technical Advisory Group (BTAG) surface water screening-benchmarks, and site-specific screening levels for swimming developed by Lockheed Martin Corporation (Lockheed Martin).

The August 2014 sampling event is the fourth of six surface-water sampling rounds to be conducted in 2014. The August sampling round assessed water quality in the summer, when increased water recreation occurs in Frog Mortar Creek. The next sampling round is scheduled for September 2014.

3.1 SURFACE WATER SAMPLING

3.1.1 Surface Water Sampling and Chemical Analyses

Forty surface water samples were collected from Frog Mortar Creek near the DRA site on August 5, 2014. Sampling locations are shown in Figure 3-1. Four samples were collected along each of nine transects, spaced approximately 350 feet apart along the western shoreline of Frog

Mortar 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).

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). Each sample was collected approximately one foot below the water surface. All surface water sampling locations were surveyed in the Maryland State Plane North American Datum 1983 (in feet) using a handheld global positioning system receiver.

Western-shoreline-transect samples (MSA-SW37 through MSA-SW45) at Frog Mortar Creek were analyzed for the following constituents:

- VOCs by SW846 Method 8260B (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 6020A/7470A
- hardness by Standard Method SM 2340B
- hexavalent chromium by USEPA Method 218.6

The eastern-shoreline-transect samples (i.e., EL-SW01A–D) were analyzed for VOCs only because previous Frog Mortar Creek sampling results either did not indicate the presence of semivolatile organic compounds (i.e., they were not detected) or the concentrations detected were less than the screening criteria, and because concentrations of metals above the screening criteria have been limited to areas adjacent to or near the western shoreline (i.e., main channel metal concentrations were less than the screening criteria). Analytical parameters for the Frog Mortar Creek samples are in Table 3-1. Water quality parameters (including temperature, pH, specific conductance, salinity, turbidity, dissolved oxygen, and oxidation-reduction potential) were recorded at the time of sampling, along with the depth of water at all surface water sampling locations. Tidal-gauge water measurements were also obtained from the staff gauge at

3301 Edwards Lane before starting and after sampling. Sampling information was documented on the sample log sheets (see Appendix A).

Surface water samples were collected as grab samples using direct-fill sampling techniques from approximately one foot below the water surface. 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 then 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 over the creek with distilled water. No decontamination fluids were collected during this sampling event.

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 must be analyzed within 24 hours of collection; therefore, these samples were expedited to the laboratory so they could be analyzed within the prescribed holding time. Field-filtered metals samples (i.e., samples for metals other than hexavalent chromium) were preserved in the field with nitric acid to the appropriate pH level and collected using a peristaltic pump. 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 field activities for the site. 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.

3.1.3 Sample Nomenclature and Handling

Surface water samples collected from transects SW37 through SW45 are identified with a unique sample identification tag. Surface water samples are labeled with an "MSA-SW" prefix, followed by the sample transect number, the profile location ("A," "B," "C," or "D"), and the six-digit sampling date. Similarly, surface water samples collected from Edwards Lane transects are identified with an "EL-SW01" prefix, the profile location ("A," "B," "C," or "D"), and the six-digit sampling date. For example, the surface water sample collected on August 5, 2014 from MSA-SW37A was labeled as MSA-SW37A-080514. The trip blank was labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-080514).

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 contained 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 decontamination activities and eliminate potential sample cross-contamination. 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 event.

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 the sampling event. 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 that day.

During field sampling, the field operations leader forwarded the chain of custody form to a designated project assistant and to the laboratory. The project assistant confirmed that the chain of custody form 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 requested analyses were performed for this project.

3.2.2 Sample Information

Data from field measurements were recorded using appropriate sample log sheets and then 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, hydrogeologic, and other environmental data collected during environmental investigations. The GIS is created from the relational database and 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 validation (to evaluate data completeness, holding times, calibrations, precision, accuracy, laboratory and field-blank contamination, and detection limits) was completed concurrent with the data evaluation. These reviews were based on the *USEPA Region III Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994) and the specifics of the analytical methods used. Data from this sampling event consist of chemical results for surface-water samples. Data validation reports and chain of custody forms

are in Appendix B (on compact disc) as PDF files. A table with all analytical data for August 2014 Frog Mortar Creek surface water samples, including non-detects, is in Appendix C.

Collectively, these data are acceptable for their intended uses (site characterization and risk assessment), except for data qualified as unreliable (UR flag). One hexavalent chromium non-detect result (sample MSA-SW39B-080514) was flagged with the "UR" data qualifier because the sample was analyzed outside of the 24 hour holding time. The data qualifiers (i.e., flags) listed below were applied to the chemical results presented in this report. The first three flags appear on 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 the value is estimated because the quantitation was above the method detection limit but below the laboratory reporting-limit.

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 is not detected. The result is considered qualitatively or quantitatively unreliable.

Table 3-1

List of Samples and Chemical Analyses for Surface Water Samples - August 2014
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 8260B)	(USEPA 6020A/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
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 were measured and recorded for each sample in the field

2 Included 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

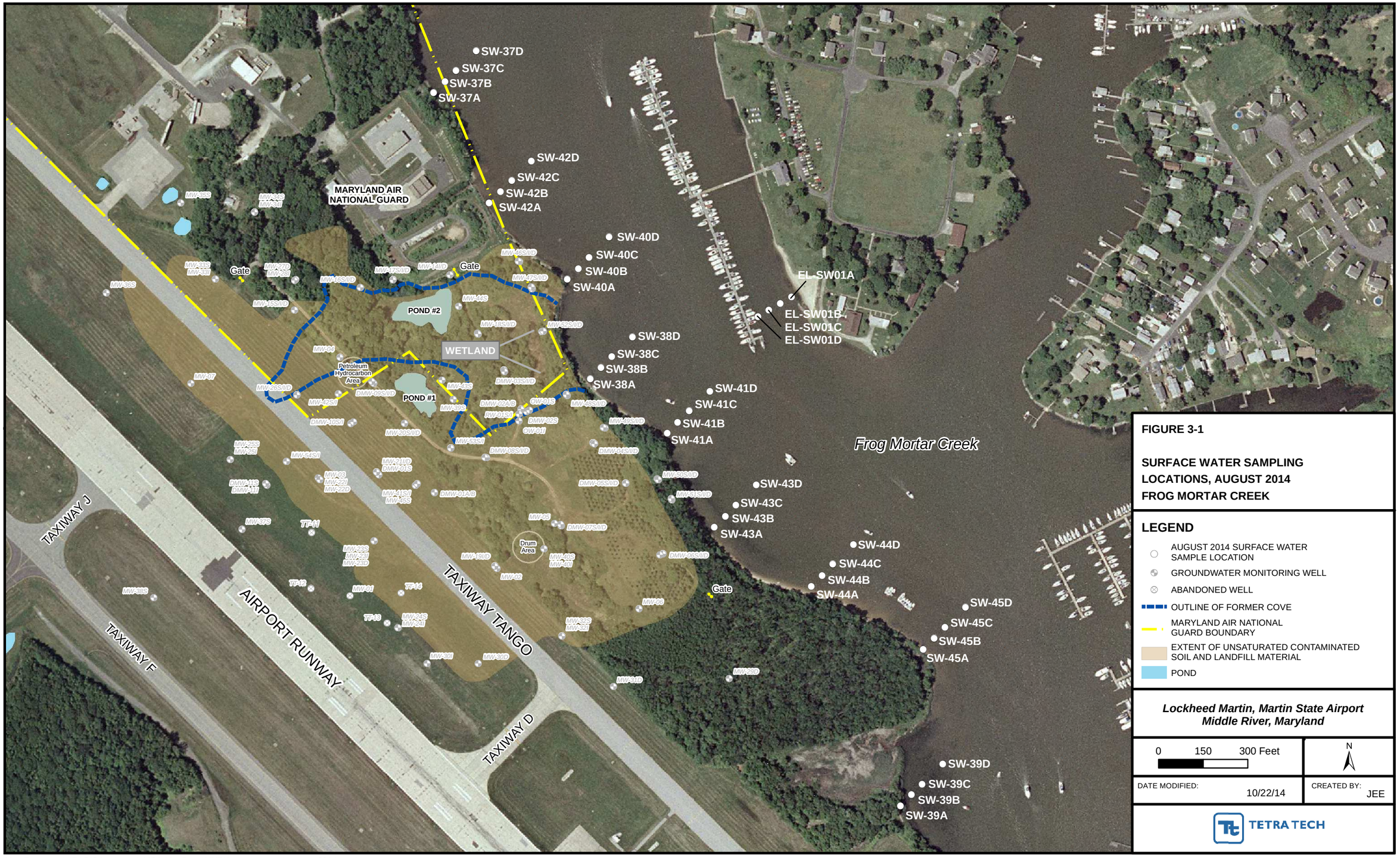

FIGURE 3-1

SURFACE WATER SAMPLING LOCATIONS, AUGUST 2014
FROG MORTAR CREEK

LEGEND

- AUGUST 2014 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
- POND

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

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Section 4
Results

4.1 SURFACE WATER DATA AND SCREENING CRITERIA

Validated chemical data from the Frog Mortar Creek surface water samples collected in August 2014 were used to generate a statistical summary table (Table 4-1) and a table summarizing positive detections of chemical analytes (Table 4-2). Samples were analyzed for volatile organic compounds (VOCs), including chlorinated VOCs (cVOCs), fuel-related compounds such as benzene, toluene, ethylbenzene, and xylenes (BTEX), dissolved (i.e., filtered) metals, hexavalent chromium, and hardness. The eastern-shoreline-transect samples (e.g., EL-SW01) were analyzed for VOCs only, for 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, 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], 2014)
- site-specific screening levels for swimming developed for trichloroethene (TCE; also known as trichloroethylene), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC)

NRWQC, AWQC, and most BTAG screening levels for metals represent dissolved-metals concentrations in the water column; these criteria are therefore used to screen against filtered (dissolved) metals results only. BTAG screening levels for arsenic, mercury, molybdenum, selenium, and thallium are based on total metals concentration; because only dissolved metals were analyzed during this sampling round, results for these five metals are not directly

comparable to BTAG criteria. NRWQC and BTAG screening values for select dissolved metals (cadmium, chromium, copper, lead, nickel, silver, and zinc) were adjusted using a site-specific hardness value of 230 milligrams per liter (mg/L) (the lowest and most protective site value measured for August results), using the methodology in *National Recommended Water Quality Criteria* (USEPA, 2002, 2009) and *Region III Biological Technical Advisory Group Freshwater Screening Benchmarks* (USEPA, 2006).

Site-specific screening levels for TCE, *cis*-1,2-DCE, and VC were developed by Lockheed Martin Corporation (Lockheed Martin) for recreational users of Frog Mortar Creek. These screening levels were developed to protect the health of swimmers near the Dump Road Area (DRA) shoreline. August sampling results are also compared to these swimming criteria because they provide the most conservative (i.e., most protective) screening levels for Frog Mortar Creek.

Gray shading in Table 4-2 indicates results that exceed one or more of their respective surface water screening criteria. Figures 4-1 through 4-3 show concentrations of TCE, *cis*-1,2-DCE, and VC (respectively) detected in August 2014 Frog Mortar Creek samples. A table summarizing analytical data, including non-detect results and detection limits, is attached as Appendix C.

4.2 SURFACE WATER SAMPLING RESULTS

Several VOCs and metals were detected in the August 2014 surface water samples; results are summarized below and in Tables 4-1 and 4-2. Since most data discussed herein share the "MSA" prefix, this prefix is dropped (e.g., "SW39" refers to transect MSA-SW39) when referring to transects or samples to increase 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.

4.2.1 Volatile Organic Compounds

The most frequently detected cVOCs were TCE, *cis*-1,2-DCE, and VC (Table 4-1); these three VOCs are also the primary cVOCs detected in the DRA groundwater plume. VOCs in August 2014 surface water samples were detected at concentrations less than human health consumption-of-organism screening levels. The following August VOC concentrations exceed the screening criteria:

- TCE in sample MSA-SW-40B (30 micrograms per liter [µg/L]) exceeds the ecological surface water screening level (21 µg/L) and the site-specific swimming screening level (10 µg/L)

- VC in samples MSA-SW-38A (3 µg/L), MSA-SW-40A (0.71 µg/L), MSA-SW-40B (1.3 µg/L), and MSA-SW-41A (0.78 µg/L) exceed the site-specific swimming screening level of 0.7 µg/L

TCE and VC concentrations in all other samples are below their respective screening levels. TCE was detected in all 40 samples at concentrations ranging from 0.21*J* µg/L to 30 µg/L (Table 4-1 and Figure 4-1). *cis*-1,2-DCE was detected in 36 of 40 samples, at concentrations ranging from 0.19*J* µg/L to 7.6 µg/L (Table 4-1 and Figure 4-2). VC was detected less frequently than TCE and *cis*-1,2-DCE (in 15 of 40 samples), at concentrations ranging from 0.22*J* µg/L to 3 µg/L (Table 4-1 and Figure 4-3). BTEX, common components of boat motor fuel and which are also found in DRA groundwater, were detected in Frog Mortar Creek surface water samples at low concentrations below the screening criteria (Tables 4-1 and 4-2), as follows: benzene (one of 40 samples), toluene (one of 40 samples), and xylenes (four of 40 samples), or was not detected (ethylbenzene). 1,2,4-Trichlorobenzene was also detected in one sample.

In prior sampling events, surface water samples from transects east of the DRA (SW38, SW40, and SW41) have typically had the highest TCE concentrations. In this August 2014 sampling round, the highest TCE concentrations were detected in the three aforementioned transects at the following locations: SW40B (30 µg/L), SW40D (4 µg/L), SW38A (3 µg/L), SW40A (2.3 µg/L), and SW41A (2.2 µg/L). These transects are east of the DRA monitoring wells exhibiting some of the highest concentrations of site-related constituents in shallow- and intermediate-depth groundwater (e.g., wells MW-52, DMW-02, DMW-4, and DMW-5). During the earlier August 2013 sampling for Frog Mortar Creek, TCE concentrations were highest at transect locations along and south of the main portion of the DRA VOC plume: SW43A (4.9 µg/L), SW41A (3.2 µg/L), SW45A (2.5 µg/L), and SW44A (1.8 µg/L). The maximum and average detected TCE concentrations for August 2014 (30 µg/L and 1.6 µg/L) are higher than those for July 2014 (2.9 µg/L and 0.76 µg/L) and August 2013 (4.9 µg/L and 1.07 µg/L).

TCE concentrations in transects from the western shore of Frog Mortar Creek varied by more than one order of magnitude in August 2014 (Figure 4-1), ranging from 0.21 µg/L (SW39A and SW39B) south of the DRA to 30 µg/L (SW40B) east of the northern portion of the DRA. TCE

concentrations generally tend to decrease with increased distance from the shoreline, although there are some exceptions, as shown in Figure 4-1. Consistent with previous sampling rounds, TCE concentrations in samples collected from the eastern shoreline transect (SW01) at Edwards Lane were typically lower than samples from the western shoreline transects: concentrations range from 0.4*J*-0.5 µg/L. August 2014 TCE results for the Edwards Lane transect are similar to concentrations detected in July 2014 (range of 0.36*J*-0.41 *J* µg/L).

cis-1,2-DCE was detected in 36 of the 40 surface water samples collected in August 2014 at concentrations ranging from 0.19 µg/L (SW39D) to 7.6 µg/L (SW38A). The only four samples without detectable concentrations of *cis*-1,2-DCE were in the southern transects at locations SW45C, SW45D, SW39A, and SW39B (Figure 4-2). Four of the highest August 2014 *cis*-1,2-DCE concentrations (7.6 µg/L, 6 µg/L, 2 µg/L and 1.7 µg/L) were collected from the three transects with the highest levels of TCE at sampling locations SW38A (7.6 µg/L), SW40B (6 µg/L), SW41A (2 µg/L), and SW40A (1.7 µg/L). *cis*-1,2-DCE detections were generally lower than those from July 2014. The July 2014 average of detected *cis*-1,2-DCE detections was 0.72 µg/L (range of 0.2–4.3 µg/L), while the average of detected *cis*-1,2-DCE detections for August 2014 was 0.9 µg/L (range of 0.19–7.6 µg/L).

VC was detected in 15 of 40 samples collected in August 2014 (Figure 4-3) with concentrations ranging from a low of 0.22*J* µg/L at SW42A and SW42D to a high of 3 µg/L at SW38A (detection concentration average of 0.62 µg/L). Similar to both TCE and *cis*-1,2-DCE, the highest concentrations of VC were detected in transects near the center of the DRA (SW38, SW40, and SW41). Four VC concentrations (3 µg/L at SW38A; 1.3 µg/L at SW40B; 0.78 µg/L at SW41A; and 0.71 µg/L at SW40A) exceed the site-specific swimming screening level (0.7 µg/L). August 2014 concentrations are slightly lower than July 2014. The July 2014 average of VC detections was 0.75 µg/L (range of 0.24*J*-3.7 µg/L), whereas the average of VC detections for August 2014 was 0.62 µg/L (range of 0.22–3 µg/L). Both August and July 2014 maximum VC concentrations (3 and 3.7 µg/L, respectively) were detected at near-shore sampling location SW38A.

4.2.2 Metals

Dissolved barium concentrations in all samples (17-19 µg/L) exceed its lowest ecological screening level (4 µg/L). August 2014 barium concentrations are generally similar to those

detected in August 2013 (15*J*–19*J* µg/L), but are slightly higher than those for July 2014 (12-13 µg/L). Dissolved cadmium exceeded its lowest ecological screening level (0.43 µg/L) at one location (SW38A), with a concentration of 0.46*J* µg/L. The remaining detected concentrations of cadmium range from 0.10–0.37 µg/L. Arsenic concentrations at 11 locations were reported at 1.5 µg/L, which exceeds the human health consumption of organism criterion of 1.4 µg/L. No other metals were detected at concentrations exceeding screening criteria.

4.2.3 Hexavalent Chromium

Hexavalent chromium was detected in 35 of 36 samples (one non-detect result for SW39B was rejected) at concentrations (0.052*J*-0.106*J* µg/L) more than two orders of magnitude (100 times) below its lowest ecological screening level (11 µg/L).

4.3 UPCOMING 2014 SAMPLING ROUNDS

Lockheed Martin will conduct additional surface water monitoring for the same 40 locations on Frog Mortar Creek in September and December 2014.

Table 4-1

Statistical Summary of Analytes Detected in Surface Water Samples—August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Chemical	Frequency of detection		Mininum non-detect concentration	Maximum non-detect concentration	Mininum detected concentration	Maximum detected concentration	Location of maximum detected concentration	Mean of all samples	Mean of positive detects	Standard deviation
	Number	Percent								
Volatile organic compounds (µg/L)										
TRICHLOROETHENE	40/40	100			0.21 J	30	MSA-SW-40B	1.6	1.6	4.7
CIS-1,2-DICHLOROETHENE	36/40	90	0.17 U	0.17 U	0.19 J	7.6	MSA-SW-38A	0.82	0.90	1.46
VINYL CHLORIDE	15/40	38	0.22 U	0.22 U	0.22 J	3	MSA-SW-38A	0.301	0.619	0.498
O-XYLENE	4/40	10	0.14 U	0.14 U	0.28 J	0.29 J	EL-SW01C	0.091	0.283	0.065
TOTAL XYLENES	4/40	10	0.14 U	0.14 U	0.28 J	0.29 J	EL-SW01C	0.091	0.283	0.065
1,2,4-TRICHLOROBENZENE	1/40	3	0.15 U	0.15 U	0.3 J	0.3 J	MSA-SW-40B	0.081	0.300	0.036
BENZENE	1/40	3	0.13 U	0.13 U	0.14 J	0.14 J	EL-SW01D	0.067	0.140	0.012
TOLUENE	1/40	3	0.13 U	0.13 U	0.15 J	0.15 J	EL-SW01A	0.067	0.150	0.013
Dissolved metals (µg/L)										
BARIUM	36/36	100	--	--	17 J	19	MSA-SW-43A,38D	17.7	17.7	0.58
MOLYBDENUM	36/36	100	--	--	1.4 J	1.8 J	MSA-SW-44B	1.58	1.58	0.1025
NICKEL	36/36	100	--	--	1.5 J	2.5	MSA-SW-43A	1.93	1.93	0.17
VANADIUM	32/36	89	0.15 U	0.15 U	0.16 J	0.92 J	MSA-SW-45B	0.441	0.487	0.286
CADMIUM	25/36	69	0.11 U	0.22 U	0.1 J	0.46 J	MSA-SW-38A	0.186	0.232	0.096
COBALT	24/36	67	0.055 U	0.16 U	0.058 J	0.47 J	MSA-SW-38A	0.1250	0.1648	0.1031
ARSENIC	22/36	61	1.1 U	1.6 U	1.3 J	1.5 J	Eleven samples	1.13	1.44	0.40
CHROMIUM	20/36	56	0.26 U	0.37 U	0.23 J	0.51 J	MSA-SW-38A	0.262	0.353	0.115
COPPER	16/36	44	6.1 U	11 U	5.1	28	MSA-SW-41D	6.09	7.96	3.96
ZINC	13/36	36	2.1 U	13 U	2.9 J	8.2 J	MSA-SW-42C	4.51	5.28	1.46
SELENIUM	10/36	28	0.34 U,UJ	1.1 U	0.4 J	0.69 J	MSA-SW-43D	0.417	0.583	0.156
ANTIMONY	7/36	19	0.29 U	0.69 U	0.19 J	0.32 J	MSA-SW-42D	0.199	0.227	0.047
LEAD	7/36	19	0.14 U	0.61 U	0.14 J	0.38 J	MSA-SW-42C	0.149	0.227	0.076
SILVER	3/36	8	0.0083 U	0.016 U	0.01 J	0.017 J	MSA-SW-37A	0.0052	0.0143	0.0030
Miscellaneous (µg/L)										
HEXAVALENT CHROMIUM	35/35[(1)]	100	--	--	0.052	0.106	MSA-SW-37D	0.0765	0.0765	0.0133
Miscellaneous (mg/L)										
CALCIUM HARDNESS AS CACO3	36/36	100	--	--	57	66	MSA-SW-43A	60.4	60.4	2.5
MAGNESIUM HARDNESS AS CACO3	36/36	100	--	--	180	230	MSA-SW-45D	202.2	202.2	13.8
HARDNESS AS CACO3	36/36	100	--	--	230	290	MSA-SW-45D	262.2	262.2	15.5

1 One sample result was rejected and is therefore not included in this total.

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration.

1/2 the detection limit was used for B qualified data.

-- non-detect concentation not available because analyte was detected in all samples.

CACO3 - calcium carbonate

EL - Edwards Lane

J - Positive result is considered estimated

µg/L - micrograms per liter

mg/L - milligrams per liter

SW - surface water

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

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

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	EL-SW01A EL-SW01A-080514 20140805	EL-SW01B EL-SW01B-080514 20140805	EL-SW01C EL-SW01C-080514 20140805	EL-SW01D EL-SW01D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	0.14 J
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	0.22 J	0.27 J	0.21 J	0.23 J
O-XYLENE	NA	NA	NA	NA	NA	0.28 J	--	0.29 J	0.28 J
TOLUENE	NA	NA	2	15000	NA	0.15 J	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	0.28 J	--	0.29 J	0.28 J
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.4 J	0.5 J	0.49 J	0.42 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	--	--	--	--
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	NA	NA	NA	NA
ARSENIC	340	150	NA[6]	1.4[3]	NA	NA	NA	NA	NA
BARIUM	NA	NA	4	NA	NA	NA	NA	NA	NA
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	NA	NA	NA	NA
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	NA	NA	NA	NA
COBALT	NA	NA	23	NA	NA	NA	NA	NA	NA
COPPER	29[7]	18[7]	18[7]	NA	NA	NA	NA	NA	NA
LEAD	158[7]	6[7]	6[7]	NA	NA	NA	NA	NA	NA
MOLYBDENUM	NA	NA	NA[6]	NA	NA	NA	NA	NA	NA
NICKEL	947[7]	105[7]	105[7]	4600	NA	NA	NA	NA	NA
SELENIUM	5	NA	1	4200	NA	NA	NA	NA	NA
SILVER	13[7]	NA	13[7]	NA	NA	NA	NA	NA	NA
VANADIUM	NA	NA	20	NA	NA	NA	NA	NA	NA
ZINC	237[7]	239[7]	239[7]	26000	NA	NA	NA	NA	NA
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	NA	NA	NA	NA

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-37A MSA-SW37A-080514 20140805	MSA-SW-37B MSA-SW37B-080514 20140805	MSA-SW-37C MSA-SW37C-080514 20140805	MSA-SW-37D MSA-SW37D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	0.57 J	0.3 J	0.31 J	0.34 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.59 J	0.6 J	0.51 J	0.62 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	0.48 J	--	--	--
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	1.5 J	1.5 J	1.4 J	1.5 J
BARIUM	NA	NA	4	NA	NA	18	17	17	17
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.31 J	0.23 J	0.2 J	0.2 J
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	0.34 J	0.26 J	0.34 J	0.25 J
COBALT	NA	NA	23	NA	NA	0.17 J	0.091 J	0.077 J	0.081 J
COPPER	29[7]	18[7]	18[7]	NA	NA	--	--	--	7.3
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.6 J	1.5 J	1.5 J	1.7 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	1.5 J	1.9 J	1.7 J	1.8 J
SELENIUM	5	NA	1	4200	NA	--	--	--	--
SILVER	13[7]	NA	13[7]	NA	NA	0.017 J	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.49 J	0.39 J	0.3 J	0.36 J
ZINC	237[7]	239[7]	239[7]	26000	NA	--	--	--	--
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	59	59	57	60
HARDNESS AS CACO3	NA	NA	NA	NA	NA	250	250	240	250
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	190	190	180	190
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.052	0.06	0.079	0.106

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-38A MSA-SW38A-080514 20140805	MSA-SW-38B MSA-SW38B-080514 20140805	MSA-SW-38C MSA-SW38C-080514 20140805	MSA-SW-38D MSA-SW38D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	7.6	0.42 J	0.44 J	0.62 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	3	0.7 J	0.82 J	1.3
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	3	--	--	0.29 J
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	1.4 J	1.4 J	1.3 J	1.4 J
BARIUM	NA	NA	4	NA	NA	17	17	18	19
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.46 J	0.19 J	0.3 J	0.33 J
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	0.51 J	0.23 J	--	--
COBALT	NA	NA	23	NA	NA	0.47 J	0.11 J	0.18 J	0.22 J
COPPER	29[7]	18[7]	18[7]	NA	NA	--	--	--	--
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.5 J	1.5 J	1.6 J	1.6 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	2.2	1.9 J	2	2
SELENIUM	5	NA	1	4200	NA	--	--	--	--
SILVER	13[7]	NA	13[7]	NA	NA	--	--	0.01 J	0.016 J
VANADIUM	NA	NA	20	NA	NA	0.36 J	0.31 J	0.66 J	0.76 J
ZINC	237[7]	239[7]	239[7]	26000	NA	--	--	--	--
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	57	57	61	61
HARDNESS AS CACO3	NA	NA	NA	NA	NA	240	250	260	260
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	190	190	200	200
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.085 J-	0.102 J-	0.066 J-	0.096 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-39A MSA-SW39A-080514 20140805	MSA-SW-39B MSA-SW39B-080514 20140805	MSA-SW-39C MSA-SW39C-080514 20140805	MSA-SW-39D MSA-SW39D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	--	--	0.23 J	0.19 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	0.28 J
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	0.28 J
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.21 J	0.21 J	0.37 J	0.34 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	--	--	--	--
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	1.5 J	1.3 J	1.4 J	1.5 J
BARIUM	NA	NA	4	NA	NA	18	18	18	18
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.1 J	0.15 J	0.17 J	0.14 J
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	0.14 J	0.12 J	0.093 J	0.058 J
COPPER	29[7]	18[7]	18[7]	NA	NA	--	--	--	--
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.6 J	1.6 J	1.6 J	1.7 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	1.7 J	1.9 J	1.9 J	1.9 J
SELENIUM	5	NA	1	4200	NA	--	--	--	--
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.36 J	0.61 J	--	--
ZINC	237[7]	239[7]	239[7]	26000	NA	--	--	--	--
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	62	62	61	63
HARDNESS AS CACO3	NA	NA	NA	NA	NA	270	270	260	270
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	210	210	200	200
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.077 J-	--	0.062 J-	0.073 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-40A MSA-SW40A-080514 20140805	MSA-SW-40B MSA-SW40B-080514 20140805	MSA-SW-40C MSA-SW40C-080514 20140805	MSA-SW-40D MSA-SW40D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	0.3 J	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	1.7	6	0.56 J	1.1
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	2.3	30	1	4
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	0.71	1.3	--	0.41 J
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	1.5 J	1.5 J	1.5 J	1.5 J
BARIUM	NA	NA	4	NA	NA	18	17	18	18
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.23 J	0.28 J	0.21 J	0.19 J
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	0.23 J	0.23 J	0.097 J	0.11 J
COPPER	29[7]	18[7]	18[7]	NA	NA	--	--	--	--
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.6 J	1.5 J	1.6 J	1.6 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	2.1	1.9 J	1.8 J	2
SELENIUM	5	NA	1	4200	NA	--	--	--	--
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.19 J	0.2 J	--	0.16 J
ZINC	237[7]	239[7]	239[7]	26000	NA	--	--	--	--
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	60	59	59	62
HARDNESS AS CACO3	NA	NA	NA	NA	NA	260	250	250	260
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	200	190	190	200
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.085 J-	0.059 J-	0.082 J-	0.086 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-41A MSA-SW41A-080514 20140805	MSA-SW-41B MSA-SW41B-080514 20140805	MSA-SW-41C MSA-SW41C-080514 20140805	MSA-SW-41D MSA-SW41D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	2	1	1.1	0.24 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	2.2	1.3	1.6	0.48 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	0.78	0.3 J	0.39 J	--
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	1.5 J	1.4 J	1.5 J	1.4 J
BARIUM	NA	NA	4	NA	NA	18	17	18	18
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.23 J	0.19 J	0.26 J	0.17 J
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	0.25 J	0.18 J	0.22 J	0.068 J
COPPER	29[7]	18[7]	18[7]	NA	NA	--	--	--	28
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.5 J	1.6 J	1.7 J	1.6 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	1.9 J	1.8 J	2	2
SELENIUM	5	NA	1	4200	NA	--	--	--	0.55 J
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.28 J	0.28 J	0.28 J	0.32 J
ZINC	237[7]	239[7]	239[7]	26000	NA	--	--	--	--
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	57	57	59	63
HARDNESS AS CACO3	NA	NA	NA	NA	NA	250	240	250	260
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	190	190	190	200
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.055 J-	0.067 J-	0.062 J-	0.077 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-42A MSA-SW42A-080514 20140805	MSA-SW-42B MSA-SW42B-080514 20140805	MSA-SW-42C MSA-SW42C-080514 20140805	MSA-SW-42D MSA-SW42D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	0.53 J	0.46 J	0.44 J	0.48 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.93 J	0.76 J	0.71 J	0.7 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	0.22 J	0.28 J	0.23 J	0.22 J
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	0.25 J	0.32 J
ARSENIC	340	150	NA[6]	1.4[3]	NA	1.4 J	1.4 J	--	--
BARIUM	NA	NA	4	NA	NA	17	17	18	18
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.2 J	0.19 J	0.25 J	0.37 J
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	--	--	0.38 J	0.38 J
COBALT	NA	NA	23	NA	NA	0.11 J	0.12 J	--	--
COPPER	29[7]	18[7]	18[7]	NA	NA	--	--	7.1	6.6
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	0.38 J	0.31 J
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.5 J	1.7 J	1.6 J	1.7 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	1.9 J	1.7 J	2.1	2
SELENIUM	5	NA	1	4200	NA	0.61 J	0.6 J	0.4 J	0.66 J
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.19 J	--	0.82 J	0.68 J
ZINC	237[7]	239[7]	239[7]	26000	NA	--	--	8.2 J	6.1 J
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	58	57	65	61
HARDNESS AS CACO3	NA	NA	NA	NA	NA	240	230	280	260
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	180	180	210	200
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.074 J-	0.085 J-	0.079 J-	0.091 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-43A MSA-SW43A-080514 20140805	MSA-SW-43B MSA-SW43B-080514 20140805	MSA-SW-43C MSA-SW43C-080514 20140805	MSA-SW-43D MSA-SW43D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	0.68 J	0.49 J	1.1	0.85 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.96 J	0.88 J	1.6	1.4
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	--	--	0.37 J	0.31 J
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	0.24 J	0.2 J	0.2 J	0.19 J
ARSENIC	340	150	NA[6]	1.4[3]	NA	--	--	--	--
BARIUM	NA	NA	4	NA	NA	19	18	18	18
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	0.25 J	--	--	--
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	0.39 J	0.37 J	0.34 J	0.34 J
COBALT	NA	NA	23	NA	NA	0.43 J	--	--	--
COPPER	29[7]	18[7]	18[7]	NA	NA	6.5	6.5	7.1	7.7
LEAD	158[7]	6[7]	6[7]	NA	NA	0.23 J	0.2 J	0.16 J	0.17 J
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.7 J	1.6 J	1.6 J	1.7 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	2.5	2	2	2
SELENIUM	5	NA	1	4200	NA	0.67 J	0.59 J	0.53 J	0.69 J
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.33 J	0.17 J	0.19 J	0.4 J
ZINC	237[7]	239[7]	239[7]	26000	NA	6.3 J	4.7 J	6.7 J	7 J
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	66	63	63	65
HARDNESS AS CACO3	NA	NA	NA	NA	NA	280	270	270	280
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	210	210	210	210
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.062 J-	0.06 J-	0.096 J-	0.077 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-44A MSA-SW44A-080514 20140805	MSA-SW-44B MSA-SW44B-080514 20140805	MSA-SW-44C MSA-SW44C-080514 20140805	MSA-SW-44D MSA-SW44D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	0.23 J	0.33 J	0.27 J	0.33 J
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.39 J	0.64 J	0.55 J	0.7 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	--	--	--	--
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	0.19 J	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	--	--	--	--
BARIUM	NA	NA	4	NA	NA	18	18 J	17 J	17
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	--	--	--	--
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	0.48 J	0.32 J	0.35 J	0.42 J
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	29[7]	18[7]	18[7]	NA	NA	6.3	7.4	6.8	6.9
LEAD	158[7]	6[7]	6[7]	NA	NA	0.14 J	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.6 J	1.8 J	1.5 J	1.4 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	2.1	1.9 J	2	1.9 J
SELENIUM	5	NA	1	4200	NA	0.53 J	--	--	--
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.32 J	0.89 J	0.85 J	0.85 J
ZINC	237[7]	239[7]	239[7]	26000	NA	7.1 J	3.3 J	4.3 J	5.7 J
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	63	59	59	59
HARDNESS AS CACO3	NA	NA	NA	NA	NA	270	280	280	270
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	210	220	220	220
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.08 J-	0.079 J-	0.079 J-	0.078 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW-45A MSA-SW45A-080514 20140805	MSA-SW-45B MSA-SW45B-080514 20140805	MSA-SW-45C MSA-SW45C-080514 20140805	MSA-SW-45D MSA-SW45D-080514 20140805
	Acute	Chronic							
Volatile organic compounds (µg/L)									
1,2,4-TRICHLOROBENZENE	NA	NA	24	70	NA	--	--	--	--
BENZENE	NA	NA	370	510[3]	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	590[5]	NA	300	0.24 J	0.25 J	--	--
O-XYLENE	NA	NA	NA	NA	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TOTAL XYLENES	NA	NA	13	NA	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[3]	10	0.38 J	0.42 J	0.29 J	0.25 J
VINYL CHLORIDE	NA	NA	930	24[3]	0.7	--	--	--	--
Dissolved metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA[6]	1.4[3]	NA	--	--	--	--
BARIUM	NA	NA	4	NA	NA	17	17	18	18
CADMIUM	4.25[7]	0.43[7]	0.43[7]	NA	NA	--	--	--	--
CHROMIUM	1127[7]	147[7]	147[7]	NA	NA	0.35 J	0.37 J	0.32 J	0.32 J
COBALT	NA	NA	23	NA	NA	--	0.1 J	--	--
COPPER	29[7]	18[7]	18[7]	NA	NA	5.1	5.6	6	6.4
LEAD	158[7]	6[7]	6[7]	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA[6]	NA	NA	1.4 J	1.4 J	1.4 J	1.4 J
NICKEL	947[7]	105[7]	105[7]	4600	NA	1.8 J	1.8 J	1.9 J	1.9 J
SELENIUM	5	NA	1	4200	NA	--	--	--	--
SILVER	13[7]	NA	13[7]	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.89 J	0.92 J	0.86 J	0.91 J
ZINC	237[7]	239[7]	239[7]	26000	NA	--	3 J	2.9 J	3.4 J
Miscellaneous (mg/L)									
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	60	62	61	60
HARDNESS AS CACO3	NA	NA	NA	NA	NA	290	280	280	290
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	NA	230	220	220	230
Miscellaneous (µg/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.086 J-	0.062 J-	0.074 J-	0.084 J-

Table 4-2

Detected Analytes and Screening Level Exceedances-August 2014
Frog Mortar Creek
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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, 2006, and 2009), the option to use site-specific hardness (230 mg/L) was selected to adjust this criterion instead of the standard hardness concentration of 100 mg/L. The minimum of 230 mg/L total hardness for the August sampling was used to adjust the criteria.

Criteria for trivalent chromium are used as surrogate values for total chromium sample concentrations because trivalent chromium criteria are lower and therefore more protective to the environment, and hexavalent chomium was analyzed/screened separately.

Gray shading indicates a result that exceeds a screening criterion.

-- not detected

CACO3 - calcium carbonate

EL - Edwards Lane

J estimated result

J- estimated result; result is biased low (i.e., true value is expected to be higher than the value shown).

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - not available (criteria columns) or not analyzed (results columns)

SW - surface water

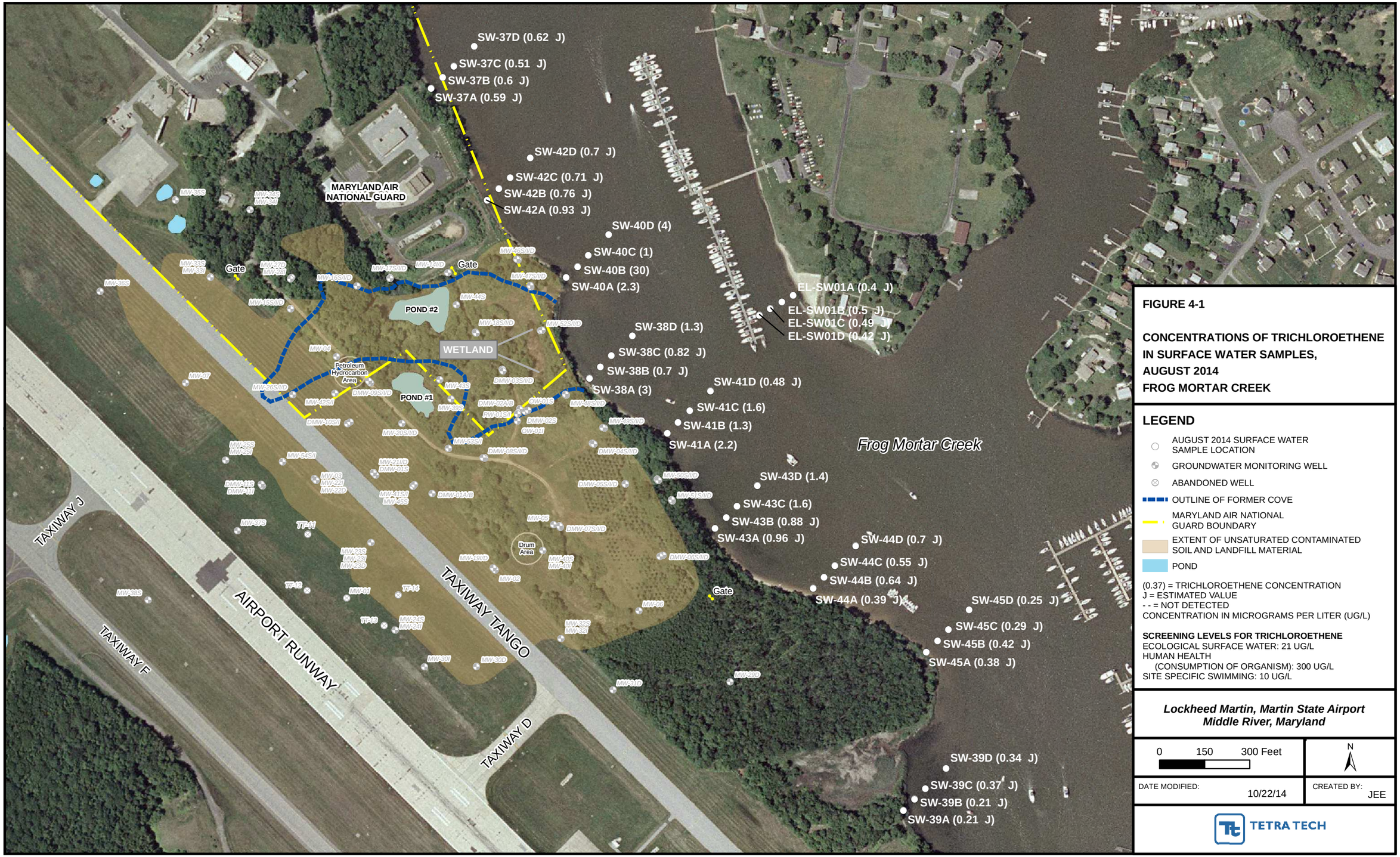

FIGURE 4-1

CONCENTRATIONS OF TRICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2014
FROG MORTAR CREEK

LEGEND

- AUGUST 2014 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
- POND

(0.37) = 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

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/22/14

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_tce_results_aug2014.mxd)
10/22/14 -- JEE

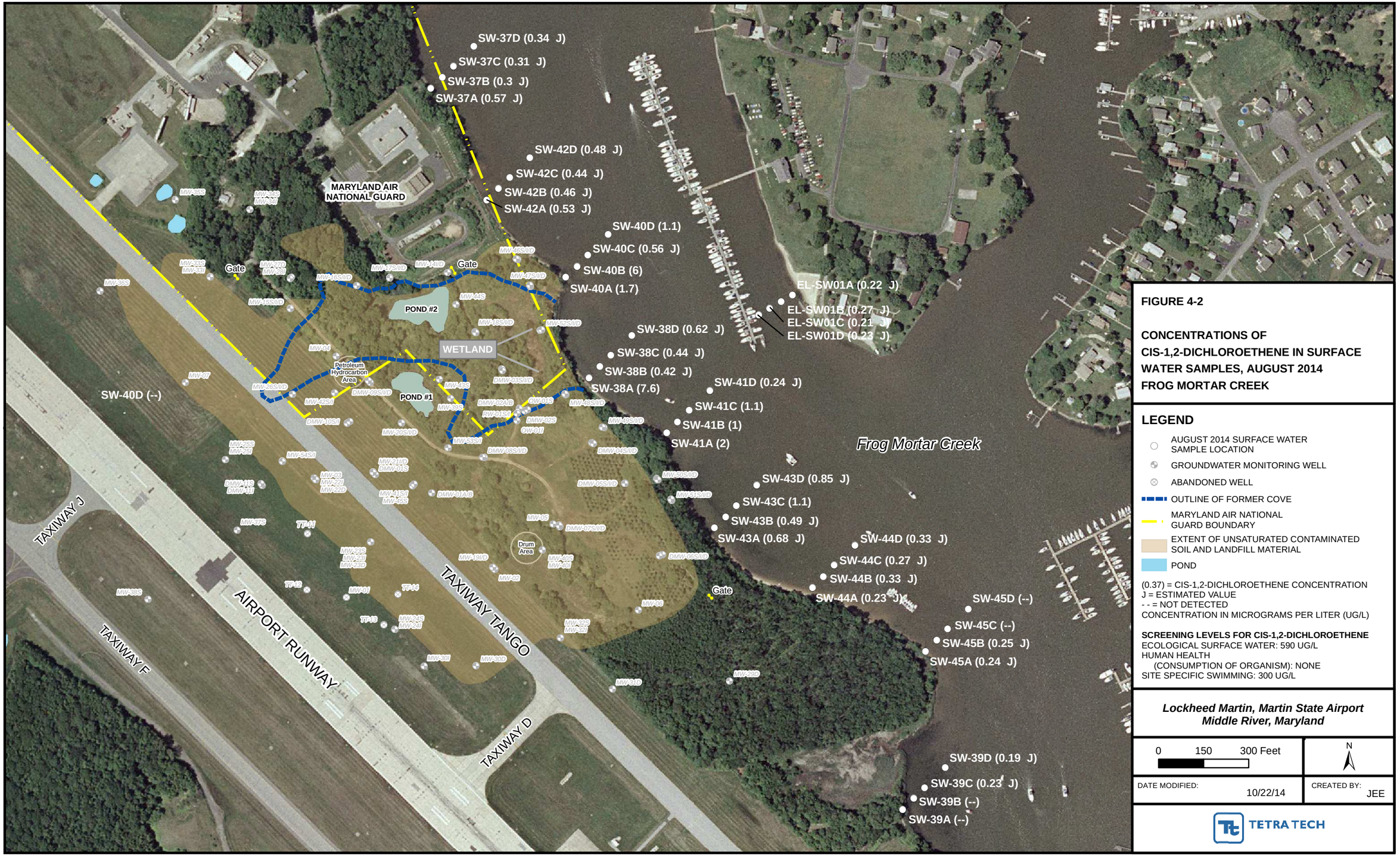

FIGURE 4-2

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2014 FROG MORTAR CREEK

LEGEND

- AUGUST 2014 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
- POND

(0.37) = 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

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/22/14

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_cis12dce_results_aug2014.mxd)
10/22/14 -- JEE

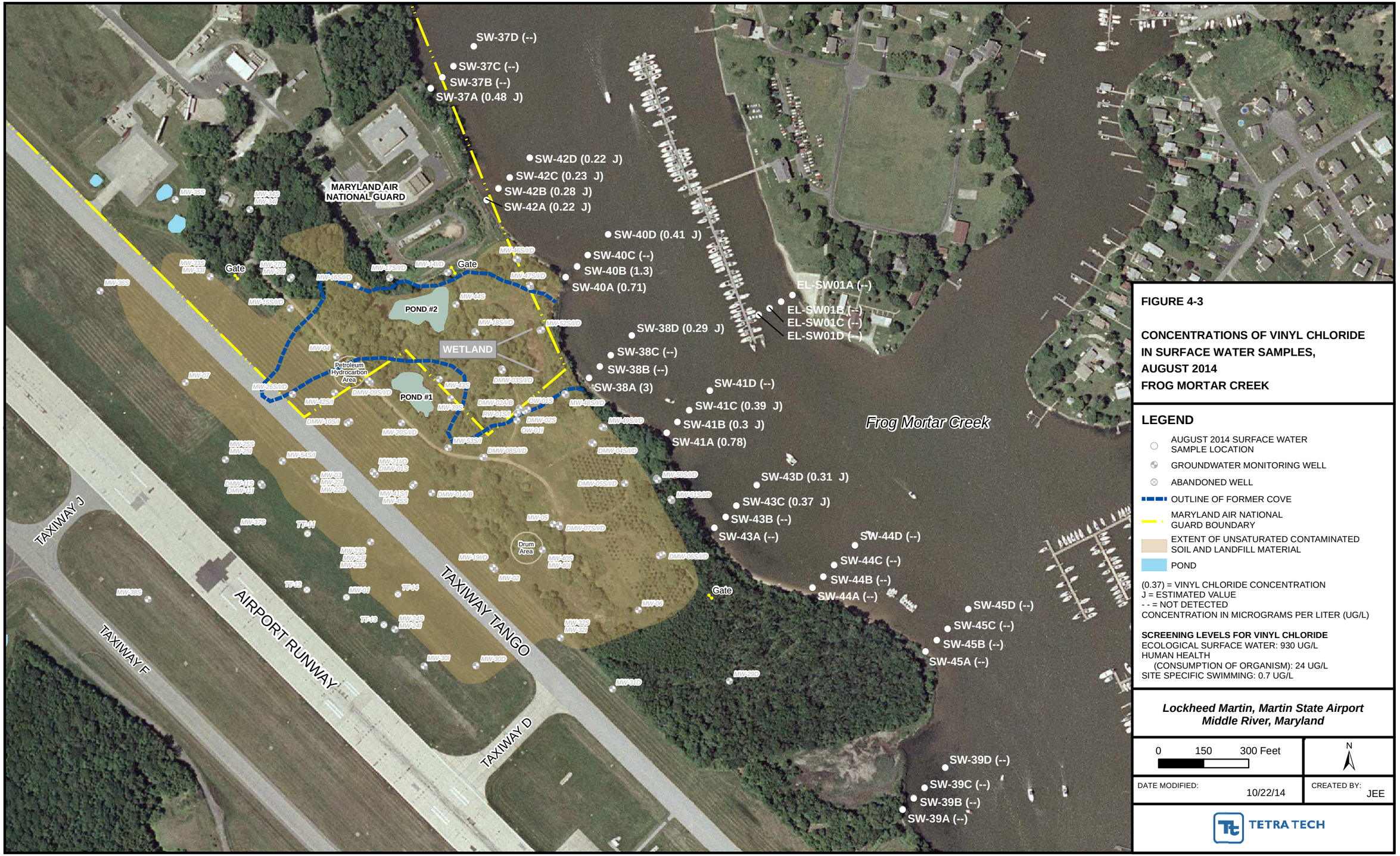

FIGURE 4-3

CONCENTRATIONS OF VINYL CHLORIDE IN SURFACE WATER SAMPLES, AUGUST 2014
FROG MORTAR CREEK

LEGEND

- AUGUST 2014 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
- POND

(0.37) = 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

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/22/14

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_VC_results_aug2014.mxd)
10/22/14 -- JEE

Section 5
Summary

The results of the August 2014 Lockheed Martin Corporation (Lockheed Martin) investigation of Frog Mortar Creek surface water are summarized below:

- Forty surface water samples were collected from Frog Mortar Creek on August 5, 2014 and chemically analyzed to assess concentrations of chemical constituents previously detected in Frog Mortar Creek, and to assess creek surface-water quality near the Dump Road Area (DRA).

- Four samples were collected from each of nine transects (spaced approximately 350 feet apart) along the western shoreline of Frog Mortar Creek. The transects are designated MSA-SW37, MSA-SW38, MSA-SW39, MSA-SW40, MSA-SW41, MSA-SW42, MSA-SW43, MSA-SW44, and MSA-SW45. An additional four samples were collected on the eastern shoreline of Frog Mortar Creek along a transect extending out from a property (3301 Edwards Lane) across the creek; this transect is designated EL-SW01. 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). Each sample was collected approximately one foot below the water surface.

- All western shoreline samples from Frog Mortar Creek were analyzed for volatile organic compounds (VOCs), filtered metals, filtered hexavalent chromium, and hardness. The four surface water samples from the Edwards Lane transect were analyzed for volatile organic compounds only.

- 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 freshwater screening-benchmarks; United States Environmental Protection Agency national recommended water quality criteria (NRWQC); Maryland ambient water quality criteria (AWQC); and site-specific surface-water screening levels developed to evaluate risks to recreational swimmers from exposure to three volatile organic compounds:

trichloroethene [TCE; also known as trichloroethylene], *cis*-1,2-dichloroethene [*cis*-1,2-DCE], and vinyl chloride [VC]).

- Volatile organic compounds (trichloroethene, *cis*-1,2-dichloroethene, vinyl chloride, xylenes, benzene, toluene, and 1,2,4-trichlorobenzene) and metals were detected in the August 2014 surface water samples.

- Trichloroethene and vinyl chloride are the only volatile organic compounds that exceed the risk-based screening criteria. Trichloroethene and vinyl chloride exceed the site-specific swimming screening levels at one location (SW40B) and at four locations (SW38A, SW40A, SW40B, and SW41A), respectively. Three of the five exceedances occurred at the shoreline or "A" sampling locations, and the other two exceedances occurred in a sample collected 50 feet from the shoreline or a "B" sampling location.

- The four sampling locations SW38A, SW40A, SW40B, and SW41A had the highest levels of trichloroethene, *cis*-1,2-dichloroethene and vinyl chloride detected in this sampling round, in addition to location SW40D for trichloroethene.

- Maximum detected concentrations of chlorinated volatile organic compounds were reported at sampling locations SW40B (trichloroethene) and SW38A (*cis*-1,2-dichloroethene and vinyl chloride). Transects SW38, SW40 and SW41 are east of the Dump Road Area monitoring wells that contain some of the highest groundwater concentrations of site-related constituents.

- Maximum and average detected trichloroethene concentrations for August 2014 (30 micrograms per liter [µg/L] and 1.6 µg/L) are higher than those for July 2014 (2.9 µg/L and 0.76 µg/L) and August 2013 (4.9 µg/L and 1.07 µg/L).

- Maximum and average detected *cis*-1,2-dichlorethene concentrations for August 2014 (7.6 µg/L and 0.9 µg/L) are higher than those for July 2014 (4.3 µg/L and 0.72 µg/L) and August 2013 (3.4 µg/L and 0.73 µg/L).

- Maximum and average detected vinyl chloride concentrations for August 2014 (3 µg/L and 0.62 µg/L) are lower than those for July 2014 (3.7 µg/L and 0.75 µg/L) and August 2013 (3.2 µg/L and 0.64 µg/L).

- Chlorinated volatile organic compound concentrations detected in samples from the eastern shoreline transect (SW01) are lower than concentrations detected in samples collected from western shoreline transects. Trichloroethene results for the August 2014 eastern-shoreline locations are very similar to the previous month's results (July 2014), and the previous years' August sampling round (August 2013).

- Dissolved barium exceeds its screening level in all 36 samples, and arsenic exceeds its lowest screening level in 11 samples. Cadmium exceeds its lowest screening level at one location.

- Dissolved hexavalent chromium was detected in 35 samples, but at trace concentrations (0.052 µg/L to 0.106 µg/L) well below its lowest screening criterion (11 µg/L).

The ongoing Frog Mortar Creek surface water sampling program continues to support the need for treatment of groundwater emanating from the Dump Road Area. A facility to accomplish this goal is currently being developed and all permitting is underway, with the goal of construction beginning in 2015.

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Section 6
References

1. *Code of Maryland Regulations* (COMAR), 2014. "Numerical Criteria for Toxic Substances in Surface Waters." COMAR Title 26, Subtitle 08, Chapter 02, Regulation 03. http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.03-2.htm.

2. Tetra Tech, Inc. (Tetra Tech), 2014a. *2014 Surface Water Sampling Work Plan, Martin State Airport, 701 Wilson Point Road, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. January.

3. Tetra Tech, Inc. (Tetra Tech), 2014b. *2013 Surface Water Sampling Report for Frog Mortar Creek, Martin State Airport, 701 Wilson Point Road, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. April.

4. United States Environmental Protection Agency (USEPA), Region 3, 1993. *Region III Modifications to the Laboratory Data-Validation Functional Guidelines for Evaluating Inorganics Analyses*. April.

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6. United States Environmental Protection Agency (USEPA), 2002. *National Recommended Water Quality Criteria: 2002*. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology. November.

7. United States Environmental Protection Agency (USEPA) 2006. *Region III Biological Technical Advisory Group Freshwater Screening Benchmarks*. August.

8. United States Environmental Protection Agency (USEPA) 2009. *National Recommended Water Quality Criteria*. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology. http://water.epa.gov/scitech/swguidance/standards/current/index.cfm or http://water.epa.gov/scitech/swguidance/standards/current/upload/nrwqc-2009.p.

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APPENDIX A—SURFACE WATER SAMPLE LOG SHEETS

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC06183

Sample ID No.: EL-SW01A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0931								
Depth: 1 foot	Clear	6.40	2.64	25.58	13.3	5.54	1.4	223
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	N
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	N

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: EL-SW01B-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0936								
Depth: 1 foot	Clear	7.17	2.64	25.55 ~~17.4~~	13.9	5.27	1.4	203
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	N
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	N

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: EC-SW01C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0939								
Depth: 1 foot	Clear	7.32	2.65	25.57	7.92	5.41	1.4	194
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	N
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	N

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: EL-SWOD-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0941								
Depth: 1 foot	Clear	7.42	2.65	25.53	10.71	5.12	1.4	188
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	N
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	N

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW39A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 0949	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot								
Method: Grab (Bacon Bomb)	Clear	7.43	2.85	25.48	10.41	6.53	1.5	172

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW39B-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0956	Clear	7.72	2.73	25.63	5.71	6.72	1.4	166
Depth: 1 foot								
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW39C- ~~MSA-39C~~ 080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1000								
Depth: 1 foot	Clear	7.77	2.72	25.79	6.60	5.55	1.4	166
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW390-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1004								
Depth: 1 foot	Clear	7.82	2.72	25.50	8.31	6.22	1.4	164
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MA-SW85A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/5/2014	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1010	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot	Clear	8.02	2.70	25.88	8.10	6.66	1.4	147
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW45B-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1015								
Depth: 1 foot	Clear	8.03	2.72	25.66	6.16	~~6.15~~ 6.18	1.4	~~418~~ 453
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW4SC-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1019								
Depth: 1 foot								
Method: Grab (Bacon Bomb)	Clear	7.97	2.72	26.13	5.85	6.16	1.4	155

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW450-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1022								
Depth: 1 foot	Clear	7.99	2.72	26.10	5.21	6.38	1.4	156
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MFA-SW44A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1032	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot	Clear	7.95	2.71	26.17	9.38	11.5	1.4	60.4
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MFA-SW448-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1035	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot	Clear	7.94	2.69	26.20	5.31	5.70	1.4	149
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW44C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1038								
Depth: 1 foot	Clear	7.95	2.69	26.27	5.31	5.93	1.4	150
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW44D-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1042								
Depth: 1 foot	Clear	7.97	2.66	26.13	6.13	5.93	1.4	151
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW43A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1047								
Depth: 1 foot	Clear	7.92	2.65	26.58	9.24	5.50	1.4	139
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: SW MSA-FMC-060514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1051								
Depth: 1 foot	Clear	7.84	2.67	26.40	5.41	5.79	1.4	123
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183
Sample ID No.: MSA-SW43C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1055								
Depth: 1 foot	Clear	7.88	2.66	26.18	8.16	5.62	1.4	152
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW430-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1100								
Depth: 1 foot	Clear	7.90	2.66	26.34	551	5.72	1.4	139
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MCA-SW4/A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1105								
Depth: 1 foot	Clear	7.80	2.62	26.74	7.12	5.61	1.5	142
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW413-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1109								
Depth: 1 foot	Clear	7.76	2.68	26.40	11.1	5.50	1.4	146
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MA-SW41C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1113								
Depth: 1 foot	Clear	7.76	2.64	26.51	9.21	5.34	1.4	148
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MA-SW410-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/5/2014								
Time:	1116								
Depth:	1 foot	Clear	7.78	2.66	26.65	6.02	5.58	1.4	149
Method:	Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MA-SW38A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1121								
Depth: 1 foot	Clear	7.76	2.62	26.75	7.69	5.57	1.3	144
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW38B-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1125								
Depth: 1 foot	Clear	7.78	2.65	26.73	6.84	5.67	1.4	149
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW38C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1128								
Depth: 1 foot	Clear	7.80	2.65	26.65	7.75	5.67	1.4	149
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW-300-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1132								
Depth: 1 foot	Clear	7.61	2.62	26.71	8.03	5.55	1.4	150
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW-FMC-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1137								
Depth: 1 foot	Clear	7.83	2.60	26.94	8.45	5.47	1.3	145
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW40B-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/5/2014								
Time:	1141								
Depth:	1 foot	Clear	7.80	2.63	27.02	7.82	5.76	1.4	149
Method:	Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW40C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1145								
Depth: 1 foot								
Method: Grab (Bacon Bomb)	Clear	7.83	2.64	26.93	8.10	8.80	1.4	140

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW400-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1148								
Depth: 1 foot	Clear	7.87	263	26.67	6.70	5.71	1.4	151
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW42A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1155								
Depth: 1 foot	Clear	7.82	2.58	27.33	11.3	6.40	1.3	148
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW-42B-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1158								
Depth: 1 foot	Clear	7.82	2.59	~~4.05~~ 27.17	9.03	5.94	1.3	150
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW42C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1202								
Depth: 1 foot	Clear	7.82	2.59	27.03	6.94	5.57	1.3	152
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MA-SW420-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/5/2014								
Time:	1206								
Depth:	1 foot	Clear	7.84	2.59	26.67	7.87	5.87	1.3	154
Method:	Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MFA-SW37A-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1212								
Depth: 1 foot	Clear	7.89	2.56	~~27.36~~ 4.76	4.46	5.72	1.3	148
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW-373-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1217								
Depth: 1 foot	Clear	7.84	2.60	26.98	4.86	5.80	1.3	151
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW37C-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/5/2014								
Time:	1221								
Depth:	1 foot	Clear	7.87	2.61	27.32	7.36	5.53	1.3	151
Method:	Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

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.: 112IC06183

Sample ID No.: MSA-SW370-080514
Sample Location: FMC SW
Sampled By: JAM
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

Date: 8/5/2014	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1225								
Depth: 1 foot	Clear	7.90	2.61	27.35	8.53	5.98	1.3	153
Method: Grab (Bacon Bomb)								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	Y
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	Y
Hexavalent Chromium	<4° C	1 - 250 mL plastic bottle	Y

OBSERVATIONS / NOTES:

Dissolved Metals filtered in field

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX B—DATA-VALIDATION REPORTS

TETRA TECH **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **OCTOBER 2, 2014**

FROM: **A. COGNETTI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOC**
MSA – SURFACE WATER – FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-40408-1

SAMPLES: 41/Aqueous/VOC

EL-SW01A-080514	EL-SW01B-080514	EL-SW01C-080514
EL-SW01D-080514	MSA-SW37A-080514	MSA-SW37B-080514
MSA-SW37C-080514	MSA-SW37D-080514	MSA-SW38A-080514
MSA-SW38B-080514	MSA-SW38C-080514	MSA-SW38D-080514
MSA-SW39A-080514	MSA-SW39B-080514	MSA-SW39C-080514
MSA-SW39D-080514	MSA-SW40A-080514	MSA-SW40B-080514
MSA-SW40C-080514	MSA-SW40D-080514	MSA-SW41A-080514
MSA-SW41B-080514	MSA-SW41C-080514	MSA-SW41D-080514
MSA-SW42A-080514	MSA-SW42B-080514	MSA-SW42C-080514
MSA-SW42D-080514	MSA-SW43A-080514	MSA-SW43B-080514
MSA-SW43C-080514	MSA-SW43D-080514	MSA-SW44A-080514
MSA-SW44B-080514	MSA-SW44C-080514	MSA-SW44D-080514
MSA-SW45A-080514	MSA-SW45B-080514	MSA-SW45C-080514
MSA-SW45D-080514	TB-080514	

Overview

The sample set for MSA Surface Water, SDG 240-40408-1 consists of forty (40) aqueous environmental samples and a trip blank analyzed for volatile organic compounds (VOCs). There is no field duplicate pair included in this SDG.

The samples were collected on August 5, 2014 and analyzed by Test America. Analyses were conducted in accordance to SW-846 Method 8260B analytical and reporting protocol.

Summary

The data contained in this SDG were validated with regard to the following parameters: data completeness, system performance, holding times, GC/MS tuning, initial / continuing calibrations, laboratory method blank results, surrogate spike/internal standard recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems

- No major noncompliances were identified.

Minor Problems

- The continuing calibration percent differences (%Ds) for carbon disulfide and 2,2-dichloropropane were greater than the 20% quality control limit on August 11, 2014 @ 12:30 on instrument A3UX17. The nondetected results of the aforementioned analytes were qualified as estimated (UJ) in the affected samples.

- The continuing calibration %Ds for several compounds were greater than the 20% quality control limit on August 12, 2014 @ 12:54 on instrument A3UX17. The compounds were acetone, 2-butanone, 2-chloroethyl vinyl ether and naphthalene. The nondetected results of the aforementioned compounds were qualified as estimated (UJ) in the affected samples.

- The continuing calibration %Ds for several compounds were greater than the 20% quality control limit on August 14, 2014 @ 10:54 on instrument A3UX17. The compounds were bromomethane, chloroethane, acetone, tert-butyl alcohol, methyl tert-butyl ether, vinyl acetate, 2,2-dichloropropane, 2-butanone, 1,2-dichloroethane, 2-chloroethyl vinyl ether, cis-1,3-dichloropropene, 4-methyl-2-pentanone, trans-1,3-dichloropropene, 1,3-dichloropropane, 2-hexanone, 1,2-dibromoethane, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, n-butylbenzene, 1,2-dibromo-3-chloropropane, and naphthalene. The detected and nondetected results of the aforementioned analytes were qualified as estimated (J) and (UJ), respectively in the affected samples.

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

Notes

Contamination was detected in the laboratory method blank associated with batch 240-142823 analyzed on August 14, 2014 on instrument A3UX14.

Contaminant	Maximum Concentration (ug/L)	Action Level (ug/L)
Methylene chloride	0.339	3.39

An action level of 10X the maximum concentration of common laboratory contaminant, methylene chloride, was established in order to evaluate samples for blank contamination. Sample aliquot and dilution factors were taken into account when applying the action level. No action was taken on the nondetected methylene chloride results. The trip blank is not qualified due to laboratory blank contamination.

The laboratory control sample (LCS) percent recovery (%R) of 2,2-dichloropropane was greater than the upper quality control limit in batch 240-142823. No action was required on the nondetected 2,2-dichloropropane results in the affected samples.

Contamination was detected in the trip blank.

Contaminant	Maximum Concentration (ug/L)
Acetone	1.2
Methylene chloride	3.1
Naphthalene	0.43
Tert-butyl alcohol	4.6

No action was taken on the nondetected results of the aforementioned analytes.

Nondetected results were reported to the MDL.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Several VOC analytes had continuing calibration %Ds exceeding quality control limits.

Other Factors Affecting Data Quality: TB-080514 contained contaminants.

The data for these analyses were reviewed with reference to the USEPA National Functional Guidelines for Organic Data Review (June 2008). The text of this report has been formulated to address only those problem areas affecting data quality.

Ann Cognetti

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

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

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

PROJ_NO: 06183	NSAMPLE	EL-SW01A-080514			EL-SW01B-080514			EL-SW01C-080514			EL-SW01D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-37			240-40408-38			240-40408-39			240-40408-40		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	UJ	C	0.18	UJ	C	0.18	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	UJ	C	0.43	UJ	C	0.43	UJ	C
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	UJ	C	0.67	UJ	C	0.67	UJ	C
1,2-DIBROMOETHANE	0.24	U		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	UJ	C	0.22	UJ	C	0.22	UJ	C
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	UJ	C	0.16	UJ	C	0.16	UJ	C
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	U		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
2-BUTANONE	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	UJ	C	0.41	UJ	C	0.41	UJ	C
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
ACETONE	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C
BENZENE	0.13	U		0.13	U		0.13	U		0.14	J	P
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	UJ	C	0.41	UJ	C	0.41	UJ	C

PROJ_NO: 06183	NSAMPLE	MSA-SW37A-080514			MSA-SW37B-080514			MSA-SW37C-080514			MSA-SW37D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-1			240-40408-2			240-40408-3			240-40408-4		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
2-BUTANONE		0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		1.1	U		1.1	U		1.1	U		1.1	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW38A-080514			MSA-SW38B-080514			MSA-SW38C-080514			MSA-SW38D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-5			240-40408-6			240-40408-7			240-40408-8		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
2-BUTANONE		0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		1.1	U		1.1	U		1.1	U		1.1	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW39A-080514			MSA-SW39B-080514			MSA-SW39C-080514			MSA-SW39D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-9			240-40408-10			240-40408-11			240-40408-12		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
2-BUTANONE	0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE	1.1	U		1.1	U		1.1	U		1.1	U	
BENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW40A-080514			MSA-SW40B-080514			MSA-SW40C-080514			MSA-SW40D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-13			240-40408-14			240-40408-15			240-40408-16		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.3	J	P	0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
2-BUTANONE	0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE	1.1	U		1.1	U		1.1	U		1.1	U	
BENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW41A-080514			MSA-SW41B-080514			MSA-SW41C-080514			MSA-SW41D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-17			240-40408-18			240-40408-19			240-40408-20		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	UJ	C	0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	UJ	C	0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	UJ	C	0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	UJ	C	0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	UJ	C	0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	UJ	C	0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	UJ	C	0.13	UJ	C	0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	UJ	C	0.57	UJ	C	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	UJ	C	0.99	UJ	C	0.99	UJ	C
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	UJ	C	0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	UJ	C	0.32	U		0.32	U	
ACETONE		1.1	U		1.1	U	C	1.1	UJ	C	1.1	UJ	C
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	UJ	C	0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW42A-080514			MSA-SW42B-080514			MSA-SW42C-080514			MSA-SW42D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-21			240-40408-22			240-40408-23			240-40408-24		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	UJ	C	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER		0.99	UJ	C	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		1.1	UJ	C	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW43A-080514			MSA-SW43B-080514			MSA-SW43C-080514			MSA-SW43D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-25			240-40408-26			240-40408-27			240-40408-28		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	UJ	C	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER		0.99	UJ	C	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		1.1	UJ	C	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW44A-080514			MSA-SW44B-080514			MSA-SW44C-080514			MSA-SW44D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-29			240-40408-30			240-40408-31			240-40408-32		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C
BENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW45A-080514			MSA-SW45B-080514			MSA-SW45C-080514			MSA-SW45D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-33			240-40408-34			240-40408-35			240-40408-36		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	UJ	C	0.57	UJ	C	0.57	UJ	C	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER		0.99	UJ	C	0.99	UJ	C	0.99	UJ	C	0.99	UJ	C
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		1.1	UJ	C	1.1	UJ	C	1.1	UJ	C	1.1	UJ	C
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 06183	NSAMPLE	TB-080514
SDG: 240-40408-1	LAB_ID	240-40408-41
FRACTION: OV	SAMP_DATE	8/5/2014
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	UJ	C
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	UJ	C
1,2-DIBROMOETHANE	0.24	UJ	C
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	UJ	C
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	UJ	C
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	UJ	C
2-BUTANONE	0.57	UJ	C
2-CHLOROETHYL VINYL ETHER	0.99	UJ	C
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	UJ	C
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	UJ	C
ACETONE	1.2	J	CP
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	UJ	C

PROJ_NO: 06183	NSAMPLE	EL-SW01A-080514			EL-SW01B-080514			EL-SW01C-080514			EL-SW01D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-37			240-40408-38			240-40408-39			240-40408-40		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	U		0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	UJ	C	0.29	UJ	C	0.29	UJ	C
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.22	J	P	0.27	J	P	0.21	J	P	0.23	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	UJ	C	0.14	UJ	C	0.14	UJ	C
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	UJ	C	0.17	UJ	C	0.17	UJ	C
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		0.12	U		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.28	J	P	0.14	U		0.29	J	P	0.28	J	P
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	UJ	C	3.9	UJ	C	3.9	UJ	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.15	J	P	0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.28	J	P	0.14	U		0.29	J	P	0.28	J	P
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	UJ	C	0.19	UJ	C	0.19	UJ	C
TRICHLOROETHENE		0.4	J	P	0.5	J	P	0.49	J	P	0.42	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW37A-080514			MSA-SW37B-080514			MSA-SW37C-080514			MSA-SW37D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-1			240-40408-2			240-40408-3			240-40408-4		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.57	J	P	0.3	J	P	0.31	J	P	0.34	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.59	J	P	0.6	J	P	0.51	J	P	0.62	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW38A-080514			MSA-SW38B-080514			MSA-SW38C-080514			MSA-SW38D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-5			240-40408-6			240-40408-7			240-40408-8		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		7.6			0.42	J	P	0.44	J	P	0.62	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		3			0.7	J	P	0.82	J	P	1.3		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW39A-080514			MSA-SW39B-080514			MSA-SW39C-080514			MSA-SW39D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-9			240-40408-10			240-40408-11			240-40408-12		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U		0.17	U		0.23	J	P	0.19	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.28	J	P
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.28	J	P
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.21	J	P	0.21	J	P	0.37	J	P	0.34	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW40A-080514			MSA-SW40B-080514			MSA-SW40C-080514			MSA-SW40D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-13			240-40408-14			240-40408-15			240-40408-16		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
CARBON TETRACHLORIDE	0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM	0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE	0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE	1.7			6			0.56	J	P	1.1		
CIS-1,3-DICHLOROPROPENE	0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER	1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE	0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES	0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE	0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE	0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE	0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE	0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER	0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE	0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE	0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES	0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE	2.3			30			1			4		
TRICHLOROFLUOROMETHANE	0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW41A-080514			MSA-SW41B-080514			MSA-SW41C-080514			MSA-SW41D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-17			240-40408-18			240-40408-19			240-40408-20		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	UJ	C	0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	UJ	C	0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		2			1			1.1			0.24	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	UJ	C	0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	UJ	C	0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		0.12	U		0.12	UJ	C	0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	UJ	C	3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	UJ	C	0.19	U		0.19	U	
TRICHLOROETHENE		2.2			1.3			1.6			0.48	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW42A-080514			MSA-SW42B-080514			MSA-SW42C-080514			MSA-SW42D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-21			240-40408-22			240-40408-23			240-40408-24		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	U		0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.53	J	P	0.46	J	P	0.44	J	P	0.48	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.93	J	P	0.76	J	P	0.71	J	P	0.7	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW43A-080514			MSA-SW43B-080514			MSA-SW43C-080514			MSA-SW43D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-25			240-40408-26			240-40408-27			240-40408-28		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	U		0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.68	J	P	0.49	J	P	1.1			0.85	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.96	J	P	0.88	J	P	1.6			1.4		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW44A-080514			MSA-SW44B-080514			MSA-SW44C-080514			MSA-SW44D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-29			240-40408-30			240-40408-31			240-40408-32		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	U		0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.23	J	P	0.33	J	P	0.27	J	P	0.33	J	P
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.39	J	P	0.64	J	P	0.55	J	P	0.7	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW45A-080514			MSA-SW45B-080514			MSA-SW45C-080514			MSA-SW45D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-33			240-40408-34			240-40408-35			240-40408-36		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.13	U		0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.24	J	P	0.25	J	P	0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	UJ	C	0.24	UJ	C	0.24	UJ	C	0.24	UJ	C
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	U		3.9	U		3.9	U		3.9	U	
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.14	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.38	J	P	0.42	J	P	0.29	J	P	0.25	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 06183	NSAMPLE	TB-080514
SDG: 240-40408-1	LAB_ID	240-40408-41
FRACTION: OV	SAMP_DATE	8/5/2014
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U	
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	UJ	C
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	UJ	C
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	UJ	C
METHYLENE CHLORIDE	3.1		
NAPHTHALENE	0.43	J	CP
N-BUTYLBENZENE	0.12	UJ	C
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	4.6	J	CP
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.14	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	UJ	C
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	

PROJ_NO: 06183	NSAMPLE	EL-SW01A-080514			EL-SW01B-080514			EL-SW01C-080514			EL-SW01D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-37			240-40408-38			240-40408-39			240-40408-40		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	UJ	C	0.19	UJ	C	0.19	UJ	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW37A-080514			MSA-SW37B-080514			MSA-SW37C-080514			MSA-SW37D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-1			240-40408-2			240-40408-3			240-40408-4		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.48	J	P	0.22	U		0.22	U		0.22	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW38A-080514			MSA-SW38B-080514			MSA-SW38C-080514			MSA-SW38D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-5			240-40408-6			240-40408-7			240-40408-8		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		3			0.22	U		0.22	U		0.29	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW39A-080514			MSA-SW39B-080514			MSA-SW39C-080514			MSA-SW39D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-9			240-40408-10			240-40408-11			240-40408-12		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW40A-080514			MSA-SW40B-080514			MSA-SW40C-080514			MSA-SW40D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-13			240-40408-14			240-40408-15			240-40408-16		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.71			1.3			0.22	U		0.41	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW41A-080514			MSA-SW41B-080514			MSA-SW41C-080514			MSA-SW41D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-17			240-40408-18			240-40408-19			240-40408-20		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	UJ	C	0.19	U		0.19	U	
VINYL CHLORIDE		0.78			0.3	J	P	0.39	J	P	0.22	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW42A-080514			MSA-SW42B-080514			MSA-SW42C-080514			MSA-SW42D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-21			240-40408-22			240-40408-23			240-40408-24		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	J	P	0.28	J	P	0.23	J	P	0.22	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW43A-080514			MSA-SW43B-080514			MSA-SW43C-080514			MSA-SW43D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-25			240-40408-26			240-40408-27			240-40408-28		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	U		0.22	U		0.37	J	P	0.31	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW44A-080514			MSA-SW44B-080514			MSA-SW44C-080514			MSA-SW44D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-29			240-40408-30			240-40408-31			240-40408-32		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 06183	NSAMPLE	MSA-SW45A-080514			MSA-SW45B-080514			MSA-SW45C-080514			MSA-SW45D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-33			240-40408-34			240-40408-35			240-40408-36		
FRACTION: OV	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 06183	NSAMPLE	TB-080514		
SDG: 240-40408-1	LAB_ID	240-40408-41		
FRACTION: OV	SAMP_DATE	8/5/2014		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	UJ	C
VINYL CHLORIDE		0.22	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01A-080514 Lab Sample ID: 240-40408-37

Matrix: Water Lab File ID: UXR5140.D

Analysis Method: 8260B Date Collected: 08/05/2014 09:31

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 22:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01A-080514 | Lab Sample ID: 240-40408-37

Matrix: Water | Lab File ID: UXR5140.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 22:08

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.22	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	0.28	J	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.15	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.40	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01A-080514 Lab Sample ID: 240-40408-37

Matrix: Water Lab File ID: UXR5140.D

Analysis Method: 8260B Date Collected: 08/05/2014 09:31

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 22:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.28	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-120
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	80		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01B-080514 | Lab Sample ID: 240-40408-38

Matrix: Water | Lab File ID: UXR5167.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U *	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01B-080514 | Lab Sample ID: 240-40408-38

Matrix: Water | Lab File ID: UXR5167.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.27	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.50	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01B-080514 | Lab Sample ID: 240-40408-38

Matrix: Water | Lab File ID: UXR5167.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	77		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01C-080514 | Lab Sample ID: 240-40408-39

Matrix: Water | Lab File ID: UXR5168.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:39

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:29

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U *	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01C-080514 | Lab Sample ID: 240-40408-39

Matrix: Water | Lab File ID: UXR5168.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:39

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:29

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.21	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	0.29	J	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.49	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01C-080514 Lab Sample ID: 240-40408-39

Matrix: Water Lab File ID: UXR5168.D

Analysis Method: 8260B Date Collected: 08/05/2014 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2014 13:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142823 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.29	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	98		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01D-080514 | Lab Sample ID: 240-40408-40

Matrix: Water | Lab File ID: UXR5169.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:52

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U *	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	0.14	J	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01D-080514 | Lab Sample ID: 240-40408-40

Matrix: Water | Lab File ID: UXR5169.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:52

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.23	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	0.28	J	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.42	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: EL-SW01D-080514 | Lab Sample ID: 240-40408-40

Matrix: Water | Lab File ID: UXR5169.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 13:52

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.28	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	76		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37A-080514 | Lab Sample ID: 240-40408-1

Matrix: Water | Lab File ID: UXR5096.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:12

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 15:15

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37A-080514 | Lab Sample ID: 240-40408-1

Matrix: Water | Lab File ID: UXR5096.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:12

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 15:15

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.57	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.59	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.48	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37A-080514 Lab Sample ID: 240-40408-1

Matrix: Water Lab File ID: UXR5096.D

Analysis Method: 8260B Date Collected: 08/05/2014 12:12

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 15:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-120
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	83		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37B-080514 | Lab Sample ID: 240-40408-2

Matrix: Water | Lab File ID: UXR5097.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:17

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 15:38

Soil Aliquot Vol: 5 (mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37B-080514 | Lab Sample ID: 240-40408-2

Matrix: Water | Lab File ID: UXR5097.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:17

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 15:38

Soil Aliquot Vol: 5 (mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.30	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.60	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37B-080514 | Lab Sample ID: 240-40408-2

Matrix: Water | Lab File ID: UXR5097.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:17

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 15:38

Soil Aliquot Vol: 5 (mL) | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	80		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37C-080514 | Lab Sample ID: 240-40408-3

Matrix: Water | Lab File ID: UXR5098.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37C-080514 Lab Sample ID: 240-40408-3

Matrix: Water Lab File ID: UXR5098.D

Analysis Method: 8260B Date Collected: 08/05/2014 12:21

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 16:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.31	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.51	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37C-080514 | Lab Sample ID: 240-40408-3

Matrix: Water | Lab File ID: UXR5098.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	82		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37D-080514 | Lab Sample ID: 240-40408-4

Matrix: Water | Lab File ID: UXR5099.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:24

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37D-080514 | Lab Sample ID: 240-40408-4

Matrix: Water | Lab File ID: UXR5099.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:24

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.34	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.62	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW37D-080514 | Lab Sample ID: 240-40408-4

Matrix: Water | Lab File ID: UXR5099.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:24

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	80		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38A-080514 | Lab Sample ID: 240-40408-5

Matrix: Water | Lab File ID: UXR5100.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:46

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38A-080514 | Lab Sample ID: 240-40408-5

Matrix: Water | Lab File ID: UXR5100.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:21

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 16:46

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	7.6		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	3.0		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	3.0		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38A-080514 Lab Sample ID: 240-40408-5

Matrix: Water Lab File ID: UXR5100.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:21

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 16:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-120
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
2037-26-5	Toluene-d8 (Surr)	78		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38B-080514 | Lab Sample ID: 240-40408-6

Matrix: Water | Lab File ID: UXR5101.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38B-080514 Lab Sample ID: 240-40408-6

Matrix: Water Lab File ID: UXR5101.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:25

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 17:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.42	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.70	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38B-080514 | Lab Sample ID: 240-40408-6

Matrix: Water | Lab File ID: UXR5101.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:09

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	77		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38C-080514 | Lab Sample ID: 240-40408-7

Matrix: Water | Lab File ID: UXR5102.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:28

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:32

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38C-080514 | Lab Sample ID: 240-40408-7

Matrix: Water | Lab File ID: UXR5102.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:28

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:32

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.44	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.82	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38C-080514 | Lab Sample ID: 240-40408-7

Matrix: Water | Lab File ID: UXR5102.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:28

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:32

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	80		66-120
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	82		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38D-080514 | Lab Sample ID: 240-40408-8

Matrix: Water | Lab File ID: UXR5103.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:54

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38D-080514 | Lab Sample ID: 240-40408-8

Matrix: Water | Lab File ID: UXR5103.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 17:54

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.62	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.3		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.29	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38D-080514 Lab Sample ID: 240-40408-8

Matrix: Water Lab File ID: UXR5103.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:32

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 17:54

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	78		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39A-080514 | Lab Sample ID: 240-40408-9

Matrix: Water | Lab File ID: UXR5104.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 18:17

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39A-080514 | Lab Sample ID: 240-40408-9

Matrix: Water | Lab File ID: UXR5104.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 18:17

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.21	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39A-080514 | Lab Sample ID: 240-40408-9

Matrix: Water | Lab File ID: UXR5104.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:49

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 18:17

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	76		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39B-080514 | Lab Sample ID: 240-40408-10

Matrix: Water | Lab File ID: UXR5105.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:56

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 18:40

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.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39B-080514 | Lab Sample ID: 240-40408-10

Matrix: Water | Lab File ID: UXR5105.D

Analysis Method: 8260B | Date Collected: 08/05/2014 09:56

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 18:40

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.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.21	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39B-080514 Lab Sample ID: 240-40408-10

Matrix: Water Lab File ID: UXR5105.D

Analysis Method: 8260B Date Collected: 08/05/2014 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 18:40

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.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	77		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39C-080514 Lab Sample ID: 240-40408-11

Matrix: Water Lab File ID: UXR5106.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:00

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 19:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39C-080514 | Lab Sample ID: 240-40408-11

Matrix: Water | Lab File ID: UXR5106.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 19:02

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.23	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.37	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39C-080514 | Lab Sample ID: 240-40408-11

Matrix: Water | Lab File ID: UXR5106.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 19:02

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	77		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39D-080514 | Lab Sample ID: 240-40408-12

Matrix: Water | Lab File ID: UXR5107.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 19:25

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39D-080514 | Lab Sample ID: 240-40408-12

Matrix: Water | Lab File ID: UXR5107.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:04

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 19:25

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.19	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	0.28	J	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.34	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW39D-080514 Lab Sample ID: 240-40408-12

Matrix: Water Lab File ID: UXR5107.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:04

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 19:25

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.28	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	78		66-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	81		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40A-080514 Lab Sample ID: 240-40408-13

Matrix: Water Lab File ID: UXR5108.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:37

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 19:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40A-080514 | Lab Sample ID: 240-40408-13

Matrix: Water | Lab File ID: UXR5108.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:37

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 19:48

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.7		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	2.3		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.71		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40A-080514 | Lab Sample ID: 240-40408-13

Matrix: Water | Lab File ID: UXR5108.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:37

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 19:48

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	80		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40B-080514 | Lab Sample ID: 240-40408-14

Matrix: Water | Lab File ID: UXR5109.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:41

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 20:11

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.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	0.30	J	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40B-080514 Lab Sample ID: 240-40408-14

Matrix: Water Lab File ID: UXR5109.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:41

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 20:11

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.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	6.0		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	30		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.3		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40B-080514 Lab Sample ID: 240-40408-14

Matrix: Water Lab File ID: UXR5109.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:41

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 20:11

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.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40C-080514 | Lab Sample ID: 240-40408-15

Matrix: Water | Lab File ID: UXR5110.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 20:33

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40C-080514 | Lab Sample ID: 240-40408-15

Matrix: Water | Lab File ID: UXR5110.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 20:33

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.56	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40C-080514 | Lab Sample ID: 240-40408-15

Matrix: Water | Lab File ID: UXR5110.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 20:33

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	75		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40D-080514 Lab Sample ID: 240-40408-16

Matrix: Water Lab File ID: UXR5111.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:48

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 20:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40D-080514 | Lab Sample ID: 240-40408-16

Matrix: Water | Lab File ID: UXR5111.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 20:56

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.1		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	4.0		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.41	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW40D-080514 | Lab Sample ID: 240-40408-16

Matrix: Water | Lab File ID: UXR5111.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 20:56

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-120
1868-53-7	Dibromofluoromethane (Surr)	101		75-121
2037-26-5	Toluene-d8 (Surr)	83		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41A-080514 Lab Sample ID: 240-40408-17

Matrix: Water Lab File ID: UXR5112.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 21:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41A-080514 Lab Sample ID: 240-40408-17

Matrix: Water Lab File ID: UXR5112.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:05

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 21:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	2.0		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	2.2		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.78		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41A-080514 | Lab Sample ID: 240-40408-17

Matrix: Water | Lab File ID: UXR5112.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:05

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 21:19

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	76		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41B-080514 Lab Sample ID: 240-40408-18

Matrix: Water Lab File ID: UXR5174.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:09

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2014 15:45

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.: 142823 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U *	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41B-080514 | Lab Sample ID: 240-40408-18

Matrix: Water | Lab File ID: UXR5174.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 15:45

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.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.3		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.30	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41B-080514 | Lab Sample ID: 240-40408-18

Matrix: Water | Lab File ID: UXR5174.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 15:45

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.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	78		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41C-080514 | Lab Sample ID: 240-40408-19

Matrix: Water | Lab File ID: UXR5122.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:13

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 15:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41C-080514 | Lab Sample ID: 240-40408-19

Matrix: Water | Lab File ID: UXR5122.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:13

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 15:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.1		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.6		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.39	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41C-080514 | Lab Sample ID: 240-40408-19

Matrix: Water | Lab File ID: UXR5122.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:13

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 15:21

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-120
1868-53-7	Dibromofluoromethane (Surr)	97		75-121
2037-26-5	Toluene-d8 (Surr)	88		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41D-080514 | Lab Sample ID: 240-40408-20

Matrix: Water | Lab File ID: UXR5123.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:16

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 15:43

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41D-080514 | Lab Sample ID: 240-40408-20

Matrix: Water | Lab File ID: UXR5123.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:16

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 15:43

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.24	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.48	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW41D-080514 | Lab Sample ID: 240-40408-20

Matrix: Water | Lab File ID: UXR5123.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:16

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 15:43

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		63-129
460-00-4	4-Bromofluorobenzene (Surr)	79		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	83		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42A-080514 | Lab Sample ID: 240-40408-21

Matrix: Water | Lab File ID: UXR5124.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42A-080514 | Lab Sample ID: 240-40408-21

Matrix: Water | Lab File ID: UXR5124.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.53	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.93	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.22	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42A-080514 | Lab Sample ID: 240-40408-21

Matrix: Water | Lab File ID: UXR5124.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:06

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	80		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42B-080514 | Lab Sample ID: 240-40408-22

Matrix: Water | Lab File ID: UXR5125.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:58

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:29

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42B-080514 | Lab Sample ID: 240-40408-22

Matrix: Water | Lab File ID: UXR5125.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:58

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:29

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.46	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.76	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.28	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42B-080514 Lab Sample ID: 240-40408-22

Matrix: Water Lab File ID: UXR5125.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:58

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 16:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	78		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42C-080514 Lab Sample ID: 240-40408-23

Matrix: Water Lab File ID: UXR5126.D

Analysis Method: 8260B Date Collected: 08/05/2014 12:02

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 16:51

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42C-080514 | Lab Sample ID: 240-40408-23

Matrix: Water | Lab File ID: UXR5126.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:51

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.44	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.71	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.23	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42C-080514 | Lab Sample ID: 240-40408-23

Matrix: Water | Lab File ID: UXR5126.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 16:51

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42D-080514 | Lab Sample ID: 240-40408-24

Matrix: Water | Lab File ID: UXR5127.D

Analysis Method: 8260B | Date Collected: 08/05/2014 12:06

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:14

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42D-080514 Lab Sample ID: 240-40408-24

Matrix: Water Lab File ID: UXR5127.D

Analysis Method: 8260B Date Collected: 08/05/2014 12:06

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 17:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.48	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.70	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.22	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW42D-080514 Lab Sample ID: 240-40408-24

Matrix: Water Lab File ID: UXR5127.D

Analysis Method: 8260B Date Collected: 08/05/2014 12:06

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 17:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	81		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43A-080514 | Lab Sample ID: 240-40408-25

Matrix: Water | Lab File ID: UXR5128.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:36

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43A-080514 | Lab Sample ID: 240-40408-25

Matrix: Water | Lab File ID: UXR5128.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:36

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.68	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.96	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43A-080514 | Lab Sample ID: 240-40408-25

Matrix: Water | Lab File ID: UXR5128.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:47

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:36

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	81		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43B-080514 | Lab Sample ID: 240-40408-26

Matrix: Water | Lab File ID: UXR5129.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:51

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:59

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43B-080514 | Lab Sample ID: 240-40408-26

Matrix: Water | Lab File ID: UXR5129.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:51

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:59

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.49	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.88	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43B-080514 | Lab Sample ID: 240-40408-26

Matrix: Water | Lab File ID: UXR5129.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:51

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 17:59

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		63-129
460-00-4	4-Bromofluorobenzene (Surr)	77		66-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	82		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43C-080514 | Lab Sample ID: 240-40408-27

Matrix: Water | Lab File ID: UXR5130.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 18:22

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43C-080514 Lab Sample ID: 240-40408-27

Matrix: Water Lab File ID: UXR5130.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:55

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 18:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.1		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.6		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.37	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43C-080514 | Lab Sample ID: 240-40408-27

Matrix: Water | Lab File ID: UXR5130.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 18:22

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	74		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	78		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43D-080514 | Lab Sample ID: 240-40408-28

Matrix: Water | Lab File ID: UXR5131.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 18:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43D-080514 | Lab Sample ID: 240-40408-28

Matrix: Water | Lab File ID: UXR5131.D

Analysis Method: 8260B | Date Collected: 08/05/2014 11:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 18:44

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.85	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.4		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.31	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW43D-080514 Lab Sample ID: 240-40408-28

Matrix: Water Lab File ID: UXR5131.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 18:44

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44A-080514 | Lab Sample ID: 240-40408-29

Matrix: Water | Lab File ID: UXR5132.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:07

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44A-080514 | Lab Sample ID: 240-40408-29

Matrix: Water | Lab File ID: UXR5132.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:07

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.23	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.39	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44A-080514 | Lab Sample ID: 240-40408-29

Matrix: Water | Lab File ID: UXR5132.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:07

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	78		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44B-080514 Lab Sample ID: 240-40408-30

Matrix: Water Lab File ID: UXR5133.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 19:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44B-080514 | Lab Sample ID: 240-40408-30

Matrix: Water | Lab File ID: UXR5133.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:30

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.33	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.64	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44B-080514 | Lab Sample ID: 240-40408-30

Matrix: Water | Lab File ID: UXR5133.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:30

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		63-129
460-00-4	4-Bromofluorobenzene (Surr)	73		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44C-080514 Lab Sample ID: 240-40408-31

Matrix: Water Lab File ID: UXR5134.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:38

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 19:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44C-080514 | Lab Sample ID: 240-40408-31

Matrix: Water | Lab File ID: UXR5134.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:38

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:52

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.27	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.55	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44C-080514 | Lab Sample ID: 240-40408-31

Matrix: Water | Lab File ID: UXR5134.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:38

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 19:52

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	77		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44D-080514 | Lab Sample ID: 240-40408-32

Matrix: Water | Lab File ID: UXR5135.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:42

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 20:15

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44D-080514 | Lab Sample ID: 240-40408-32

Matrix: Water | Lab File ID: UXR5135.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:42

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 20:15

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.33	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.70	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW44D-080514 | Lab Sample ID: 240-40408-32

Matrix: Water | Lab File ID: UXR5135.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:42

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 20:15

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45A-080514 Lab Sample ID: 240-40408-33

Matrix: Water Lab File ID: UXR5136.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 20:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45A-080514 | Lab Sample ID: 240-40408-33

Matrix: Water | Lab File ID: UXR5136.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 20:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.24	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.38	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45A-080514 | Lab Sample ID: 240-40408-33

Matrix: Water | Lab File ID: UXR5136.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 20:38

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45B-080514 | Lab Sample ID: 240-40408-34

Matrix: Water | Lab File ID: UXR5137.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 21:00

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45B-080514 | Lab Sample ID: 240-40408-34

Matrix: Water | Lab File ID: UXR5137.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 21:00

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.25	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.42	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45B-080514 Lab Sample ID: 240-40408-34

Matrix: Water Lab File ID: UXR5137.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 21:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	77		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45C-080514 Lab Sample ID: 240-40408-35

Matrix: Water Lab File ID: UXR5138.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:19

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 21:23

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45C-080514 | Lab Sample ID: 240-40408-35

Matrix: Water | Lab File ID: UXR5138.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:19

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 21:23

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.29	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45C-080514 | Lab Sample ID: 240-40408-35

Matrix: Water | Lab File ID: UXR5138.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:19

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 21:23

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	75		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45D-080514 | Lab Sample ID: 240-40408-36

Matrix: Water | Lab File ID: UXR5139.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 21:46

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45D-080514 | Lab Sample ID: 240-40408-36

Matrix: Water | Lab File ID: UXR5139.D

Analysis Method: 8260B | Date Collected: 08/05/2014 10:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 21:46

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.25	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW45D-080514 Lab Sample ID: 240-40408-36

Matrix: Water Lab File ID: UXR5139.D

Analysis Method: 8260B Date Collected: 08/05/2014 10:22

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 21:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	71		66-120
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	74		74-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: TB-080514 | Lab Sample ID: 240-40408-41

Matrix: Water | Lab File ID: UXR5170.D

Analysis Method: 8260B | Date Collected: 08/05/2014 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 14:14

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U *	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.2	J	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: TB-080514 Lab Sample ID: 240-40408-41

Matrix: Water Lab File ID: UXR5170.D

Analysis Method: 8260B Date Collected: 08/05/2014 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2014 14:14

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142823 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	3.1	B	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	0.43	J	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	4.6	J	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: TB-080514 | Lab Sample ID: 240-40408-41

Matrix: Water | Lab File ID: UXR5170.D

Analysis Method: 8260B | Date Collected: 08/05/2014 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 14:14

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	79		74-120

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water Sampling

Report Number: 240-40408-1

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

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

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

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

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

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

RECEIPT

The samples were received on 8/6/2014 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.2° C and 4.8° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3), MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35), MSA-SW45D-080514 (240-40408-36), EL-SW01A-080514 (240-40408-37), EL-SW01B-080514 (240-40408-38), EL-SW01C-080514 (240-40408-39), EL-SW01D-080514 (240-40408-40) and TB-080514 (240-40408-41) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/11/2014, 08/12/2014 and 08/14/2014.

Methylene Chloride was detected in method blank MB 240-142823/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 142823 recovered outside control limits for the following analyte(s): 2,2-Dichloropropene. 2,2-Dichloropropene has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

There was no MS/MSD run in batch 142823 due to an instrument failure: EL-SW01B-080514 (240-40408-38), EL-SW01C-080514 (240-40408-39), EL-SW01D-080514 (240-40408-40), MSA-SW41B-080514 (240-40408-18), and TB-080514 (240-40408-41).

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-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3),

MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35) and MSA-SW45D-080514 (240-40408-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/08/2014 and 08/11/2014 and analyzed on 08/12/2014, 08/13/2014 and 08/14/2014.

Several analytes were detected in method blank MB 240-142080/1-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.

Copper was detected in method blank MB 240-142276/1-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 240-142276/1-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.

Arsenic and Tungsten were detected in method blank MB 240-142287/1-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.

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-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3), MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35) and MSA-SW45D-080514 (240-40408-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/08/2014 and 08/11/2014 and analyzed on 08/11/2014 and 08/12/2014.

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-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3), MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35) and MSA-SW45D-080514 (240-40408-36) were analyzed for dissolved hardness (as CaCO3) by calculation in accordance with SM 2340B. The samples were analyzed on 08/11/2014.

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

2.2.4.8

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 112-I06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW37A-080514	8/5/14	1212	SW	Water	4	x	x	x	x	
MSA-SW37B-080514	8/5/14	1217	SW	Water	4	x	x	x	x	
MSA-SW37C-080514	8/5/14	1221	SW	Water	4	x	x	x	x	
MSA-SW37D-080514	8/5/14	1225	SW	Water	4	x	x	x	x	
MSA-SW38A-080514	8/5/14	1121	SW	Water	4	x	x	x	x	
MSA-SW38B-080514	8/5/14	1125	SW	Water	4	x	x	x	x	
MSA-SW38C-080514	8/5/14	~~1132~~ 1128	SW	Water	4	x	x	x	x	
MSA-SW38D-080514	8/5/14	1132	SW	Water	4	x	x	x	x	
MSA-SW39A-080514	8/5/14	0949	SW	Water	4	x	x	x	x	
MSA-SW39B-080514	8/5/14	0956	SW	Water	4	x	x	x	x	
MSA-SW39C-080514	8/5/14	1000	SW	Water	4	x	x	x	x	
MSA-SW39D-080514	8/5/14	1006	SW	Water	4	x	x	x	x	

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Preservation Used: (1)= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
(X) 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 (X) Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments: DISSOLVED METALS FILTERED IN FIELD

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Tetra Tech	8/5/14 1500		TA Canton	8-6-14 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Ananavage	Site Contact: Tony Ananavage	Date: 8/5/14	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. 112IC06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: J. Mull/S
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW40A-080514	8/5/14	1137	SW	Water	4	x	x	x	x	
MSA-SW40B-080514	8/5/14	1141	SW	Water	4	x	x	x	x	
MSA-SW40C-080514	8/5/14	1145	SW	Water	4	x	x	x	x	
MSA-SW40D-080514	8/5/14	1148	SW	Water	4	x	x	x	x	
MSA-SW41A-080514	8/5/14	1105	SW	Water	4	x	x	x	x	
MSA-SW41B-080514	8/5/14	1109	SW	Water	4	x	x	x	x	
MSA-SW41C-080514	8/5/14	1113	SW	Water	4	x	x	x	x	
MSA-SW41D-080514	8/5/14	1116	SW	Water	4	x	x	x	x	
MSA-SW42A-080514	8/5/14	1155	SW	Water	4	x	x	x	x	
MSA-SW42B-080514	8/5/14	1158	SW	Water	4	x	x	x	x	
MSA-SW42C-080514	8/5/14	1202	SW	Water	4	x	x	x	x	
MSA-SW42D-080514	8/5/14	1206	SW	Water	4	x	x	x	x	

Preservation Used: (1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other)

Possible Hazard Identification
(X) *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* (X) *Disposal By Lab* ☐ *Archive For* *Months*

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

	Company:	Date/Time:		Company:	Date/Time:
Relinquished by:	Tetra Tech	8/5/14 1500	Received by:	TA Canton	8-6-14 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 112IC06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler: J. Mullis

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW43A-080514	8/5/14	1047	SW	Water	4	x	x	x	x	
MSA-SW43B-080514	8/5/14	1051	SW	Water	4	x	x	x	x	
MSA-SW43C-080514	8/5/14	1055	SW	Water	4	x	x	x	x	
MSA-SW43D-080514	8/5/14	1100	SW	Water	4	x	x	x	x	
MSA-SW44A-080514	8/5/14	1032	SW	Water	4	x	x	x	x	
MSA-SW44B-080514	8/5/14	1035	SW	Water	4	x	x	x	x	
MSA-SW44C-080514	8/5/14	1038	SW	Water	4	x	x	x	x	
MSA-SW44D-080514	8/5/14	1042	SW	Water	4	x	x	x	x	
MSA-SW45A-080514	8/5/14	1010	SW	Water	4	x	x	x	x	
MSA-SW45B-080514	8/5/14	1015	SW	Water	4	x	x	x	x	
MSA-SW45C-080514	8/5/14	1019	SW	Water	4	x	x	x	x	
MSA-SW45D-080514	8/5/14	1022	SW	Water	4	x	x	x	x	

Preservation Used: 1= Ice 2= HCl: 3= H2SO4: 4=HNO3: 5=NaOH: 6= Other

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

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

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/5/14 1500	[signature]	TA Canton	8-6-14 9:20

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 180-106183
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			Sampler: T. Mills
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
EL-SW01A-080514	8/5/14	0931	SW	AQ	3		x	
EL-SW01B-080514	8/5/14	0936	SW	AQ	3		x	
EL-SW01C-080514	8/5/14	0939	SW	AQ	3		x	
EL-SW01D-080514	8/5/14	0941	SW	AQ	3		x	
TB-080514	--	--	TB	AQ	3		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

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

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

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/5/14 1500		TAL Canton	8/6/14 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 40408
Canton Facility

Client Tetra Tech Site Name MS+Surface Cooler unpacked by: Jenny Stetler

Cooler Received on 8-6-14 Opened on 8-6-14

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

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

IR GUN# A	(CF +2 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4	(CF -2 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☒ See Multiple Cooler Form
IR GUN# 5	(CF 0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF 0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? (1 each) Yes No NA
   - -Were custody seals on the bottle(s)? 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. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC412469
11. Were VOAs on the COC? Yes No 8-6-14
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? 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 # : 40408

Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
clt cooler	8	2.2	2.2	wet ice
clt cooler	8	4.8	4.8	1

SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-40408-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-40408-1	MSA-SW37A-080514	Water	08/05/2014 1212	08/06/2014 0920
240-40408-2	MSA-SW37B-080514	Water	08/05/2014 1217	08/06/2014 0920
240-40408-3	MSA-SW37C-080514	Water	08/05/2014 1221	08/06/2014 0920
240-40408-4	MSA-SW37D-080514	Water	08/05/2014 1225	08/06/2014 0920
240-40408-5	MSA-SW38A-080514	Water	08/05/2014 1121	08/06/2014 0920
240-40408-6	MSA-SW38B-080514	Water	08/05/2014 1125	08/06/2014 0920
240-40408-7	MSA-SW38C-080514	Water	08/05/2014 1128	08/06/2014 0920
240-40408-8	MSA-SW38D-080514	Water	08/05/2014 1132	08/06/2014 0920
240-40408-9	MSA-SW39A-080514	Water	08/05/2014 0949	08/06/2014 0920
240-40408-10	MSA-SW39B-080514	Water	08/05/2014 0956	08/06/2014 0920
240-40408-11	MSA-SW39C-080514	Water	08/05/2014 1000	08/06/2014 0920
240-40408-12	MSA-SW39D-080514	Water	08/05/2014 1004	08/06/2014 0920
240-40408-13	MSA-SW40A-080514	Water	08/05/2014 1137	08/06/2014 0920
240-40408-14	MSA-SW40B-080514	Water	08/05/2014 1141	08/06/2014 0920
240-40408-15	MSA-SW40C-080514	Water	08/05/2014 1145	08/06/2014 0920
240-40408-16	MSA-SW40D-080514	Water	08/05/2014 1148	08/06/2014 0920
240-40408-17	MSA-SW41A-080514	Water	08/05/2014 1105	08/06/2014 0920
240-40408-18	MSA-SW41B-080514	Water	08/05/2014 1109	08/06/2014 0920
240-40408-19	MSA-SW41C-080514	Water	08/05/2014 1113	08/06/2014 0920
240-40408-20	MSA-SW41D-080514	Water	08/05/2014 1116	08/06/2014 0920
240-40408-21	MSA-SW42A-080514	Water	08/05/2014 1155	08/06/2014 0920
240-40408-22	MSA-SW42B-080514	Water	08/05/2014 1158	08/06/2014 0920
240-40408-23	MSA-SW42C-080514	Water	08/05/2014 1202	08/06/2014 0920
240-40408-24	MSA-SW42D-080514	Water	08/05/2014 1206	08/06/2014 0920
240-40408-25	MSA-SW43A-080514	Water	08/05/2014 1047	08/06/2014 0920
240-40408-26	MSA-SW43B-080514	Water	08/05/2014 1051	08/06/2014 0920
240-40408-27	MSA-SW43C-080514	Water	08/05/2014 1055	08/06/2014 0920
240-40408-28	MSA-SW43D-080514	Water	08/05/2014 1100	08/06/2014 0920
240-40408-29	MSA-SW44A-080514	Water	08/05/2014 1032	08/06/2014 0920
240-40408-30	MSA-SW44B-080514	Water	08/05/2014 1035	08/06/2014 0920
240-40408-31	MSA-SW44C-080514	Water	08/05/2014 1038	08/06/2014 0920
240-40408-32	MSA-SW44D-080514	Water	08/05/2014 1042	08/06/2014 0920
240-40408-33	MSA-SW45A-080514	Water	08/05/2014 1010	08/06/2014 0920
240-40408-34	MSA-SW45B-080514	Water	08/05/2014 1015	08/06/2014 0920
240-40408-35	MSA-SW45C-080514	Water	08/05/2014 1019	08/06/2014 0920
240-40408-36	MSA-SW45D-080514	Water	08/05/2014 1022	08/06/2014 0920
240-40408-37	EL-SW01A-080514	Water	08/05/2014 0931	08/06/2014 0920
240-40408-38	EL-SW01B-080514	Water	08/05/2014 0936	08/06/2014 0920
240-40408-39	EL-SW01C-080514	Water	08/05/2014 0939	08/06/2014 0920
240-40408-40	EL-SW01D-080514	Water	08/05/2014 0941	08/06/2014 0920
240-40408-41	TB-080514	Water	08/05/2014 0000	08/06/2014 0920

METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-40408-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Priority Pollutants	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B
Metals (ICP/MS)	TAL CAN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL CAN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL CAN	SW846 7470A	
Preparation, Mercury	TAL CAN		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
Total Hardness (as CaCO3) by calculation	TAL CAN	SM SM 2340B	
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: BFB216.D BFB Injection Date: 07/25/2014

Instrument ID: A3UX17 BFB Injection Time: 14:52

Analysis Batch No.: 140162

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.8	
75	30.0 - 60.0 % of mass 95	46.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	83.4	
175	5.0 - 9.0 % of mass 174	6.4	(7.6)1
176	95.0 - 101.0 % of mass 174	81.8	(98.0)1
177	5.0 - 9.0 % of mass 176	5.2	(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
	STD8260 240-140162/2	UXR4840.D	07/25/2014	15:24
	STD8260 240-140162/3	UXR4841.D	07/25/2014	15:47
	STD8260 240-140162/4	UXR4842.D	07/25/2014	16:09
	STD8260 240-140162/5	UXR4843.D	07/25/2014	16:32
	STD8260 240-140162/6	UXR4844.D	07/25/2014	16:55
	STD8260 240-140162/7	UXR4845.D	07/25/2014	17:17
	STDA9 240-140162/8	UXR4846.D	07/25/2014	17:40
	STDA9 240-140162/9	UXR4847.D	07/25/2014	18:02
	STDA9 240-140162/10	UXR4848.D	07/25/2014	18:25
	STDA9 240-140162/11	UXR4849.D	07/25/2014	18:48
	STDA9 240-140162/12	UXR4850.D	07/25/2014	19:10
	STDA9 240-140162/13	UXR4851.D	07/25/2014	19:32
	ICV 240-140162/14	UXR4852.D	07/25/2014	19:54
	ICV 240-140162/15	UXR4853.D	07/25/2014	20:16

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 15:24 Calibration End Date: 07/25/2014 17:17 Calibration ID: 23461

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-140162/7	UXR4845.D
Level 2	STD8260 240-140162/6	UXR4844.D
Level 3	STD8260 240-140162/5	UXR4843.D
Level 4	STD8260 240-140162/4	UXR4842.D
Level 5	STD8260 240-140162/3	UXR4841.D
Level 6	STD8260 240-140162/2	UXR4840.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	0.4107 0.3762	0.3537	0.3615	0.3696	0.3555	Ave		0.3712				5.7		15.0			
Chloromethane	0.6207 0.5114	0.4984	0.4785	0.5074	0.4706	Ave		0.5145			0.1000	11.0		15.0			
Vinyl chloride	0.4671 0.4131	0.4009	0.3980	0.4070	0.3893	Ave		0.4126				6.8		15.0			
Butadiene	0.3505 0.2803	0.3049	0.2638	0.3274	0.2775	Ave		0.3007				11.0		15.0			
Bromomethane	0.1223 0.0880	0.1026	0.0871	0.1042	0.0894	Ave		0.0989				14.0		15.0			
Chloroethane	0.2386 0.1478	0.1566	0.1479	0.1580	0.1390	Lin1	0.0423	0.1444							0.9980		0.9900
Dichlorofluoromethane	0.3549 0.3498	0.3477	0.3229	0.3404	0.3270	Ave		0.3405				3.8		15.0			
Trichlorofluoromethane	0.3020 0.3387	0.2968	0.3064	0.3234	0.3128	Ave		0.3133				4.9		15.0			
Ethyl ether	0.3465 0.2967	0.2871	0.2953	0.3191	0.2905	Ave		0.3059				7.5		15.0			
Acrolein	0.0323 0.0284	0.0258	0.0269	0.0297	0.0283	Ave		0.0286				8.0		15.0			
1,1-Dichloroethene	0.2835 0.2920	0.2607	0.2689	0.2914	0.2688	Ave		0.2775				4.7		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2298 0.2212	0.2006	0.2101	0.2209	0.2105	Ave		0.2155				4.8		15.0			
Acetone	0.4440 0.1030	0.1771	0.1344	0.1307	0.1112	Lin1	0.3413	0.1016							0.9970		0.9900
Iodomethane	0.3445 0.3181	0.3162	0.3132	0.3532	0.3213	Ave		0.3277				5.1		15.0			
Carbon disulfide	0.6002 0.7576	0.5766	0.6070	0.6948	0.6713	Ave		0.6513				11.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI

GC/MS VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 15:24 Calibration End Date: 07/25/2014 17:17 Calibration ID: 23461

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	0.1165 0.1524	0.1189	0.1298	0.1478	0.1403	Ave		0.1343				11.0		15.0			
Methyl acetate	0.2596 0.2531	0.2395	0.2432	0.2653	0.2416	Ave		0.2504				4.2		15.0			
Methylene Chloride	0.5791 0.2812	0.3350	0.2950	0.3013	0.2756	Lin1	0.1444	0.2754							0.9990		0.9900
tert-Butyl alcohol	0.0203 0.0165	0.0170	0.0170	0.0182	0.0162	Ave		0.0175				8.7		15.0			
Acrylonitrile	0.1257 0.1353	0.1246	0.1271	0.1415	0.1282	Ave		0.1304				5.1		15.0			
Methyl tert-butyl ether	0.6347 0.6757	0.5824	0.6277	0.7023	0.6450	Ave		0.6446				6.4		15.0			
trans-1,2-Dichloroethene	0.2907 0.2923	0.2709	0.2792	0.3028	0.2808	Ave		0.2861				4.0		15.0			
Hexane	0.0719 0.0804	0.0664	0.0735	0.0807	0.0748	Ave		0.0746				7.2		15.0			
1,1-Dichloroethane	0.5580 0.5803	0.5261	0.5398	0.5999	0.5531	Ave		0.5595			0.1000	4.8		15.0			
Vinyl acetate	0.2976 0.4752	0.3650	0.3732	0.4444	0.4345	Lin1	-0.124	0.4601							0.9970		0.9900
2,2-Dichloropropane	0.1588 0.1665	0.1532	0.1517	0.1754	0.1714	Ave		0.1628				6.0		15.0			
cis-1,2-Dichloroethene	0.2760 0.3026	0.2761	0.2873	0.3133	0.2905	Ave		0.2910				5.1		15.0			
2-Butanone	0.1658 0.1467	0.1460	0.1485	0.1597	0.1445	Ave		0.1519				5.8		15.0			
Bromochloromethane	0.1478 0.1467	0.1354	0.1426	0.1561	0.1443	Ave		0.1455				4.7		15.0			
Tetrahydrofuran	0.1243 0.0902	0.0883	0.0827	0.0936	0.0874	Lin1	0.0240	0.0887							0.9980		0.9900
Chloroform	0.4509 0.4760	0.4432	0.4520	0.4849	0.4552	Ave		0.4604				3.5		15.0			
1,1,1-Trichloroethane	0.2698 0.2956	0.2680	0.2783	0.3127	0.2938	Ave		0.2864				6.1		15.0			
Cyclohexane	0.4972 0.6317	0.5082	0.5558	0.6334	0.5985	Ave		0.5708				10.0		15.0			
1,1-Dichloropropene	0.3115 0.3773	0.3398	0.3404	0.3863	0.3607	Ave		0.3527				7.8		15.0			
Carbon tetrachloride	0.2838 0.3056	0.2506	0.2696	0.3008	0.2890	Ave		0.2832				7.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 15:24 Calibration End Date: 07/25/2014 17:17 Calibration ID: 23461

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	0.0132 0.0122	0.0112	0.0127	0.0130	0.0124	Ave		0.0125				5.8		15.0			
Benzene	1.1804 1.2225	1.1425	1.1390	1.2473	1.1503	Ave		1.1803				3.8		15.0			
1,2-Dichloroethane	0.4349 0.4342	0.4169	0.4279	0.4553	0.4123	Ave		0.4303				3.6		15.0			
n-Heptane	0.0600 0.0731	0.0567	0.0624	0.0759	0.0674	Ave		0.0659				11.0		15.0			
Trichloroethene	0.3176 0.3094	0.2941	0.2916	0.3228	0.2937	Ave		0.3049				4.4		15.0			
Methylcyclohexane	0.3925 0.4728	0.3712	0.4060	0.4721	0.4459	Ave		0.4268				10.0		15.0			
1,2-Dichloropropane	0.3025 0.3279	0.2949	0.2994	0.3423	0.3129	Ave		0.3133				5.9		15.0			
Dibromomethane	0.1577 0.1544	0.1407	0.1442	0.1599	0.1488	Ave		0.1509				5.1		15.0			
1,4-Dioxane	0.0019 0.0024	0.0025	0.0024	0.0024	0.0026	Ave		0.0024				10.0		15.0			
Bromodichloromethane	0.2768 0.3380	0.2715	0.2846	0.3230	0.3084	Ave		0.3004				9.0		15.0			
2-Chloroethyl vinyl ether	0.1228 0.1984	0.1393	0.1619	0.1953	0.1833	Lin1	-0.114	0.1941							0.9970		0.9900
cis-1,3-Dichloropropene	0.2295 0.3936	0.2722	0.3037	0.3560	0.3531	Lin1	-0.125	0.3780							0.9950		0.9900
4-Methyl-2-pentanone	0.2448 0.2897	0.2208	0.2466	0.2979	0.2753	Ave		0.2625				11.0		15.0			
Toluene	1.3627 1.7724	1.5399	1.6611	1.8062	1.6890	Ave		1.6386				10.0		15.0			
trans-1,3-Dichloropropene	0.2543 0.4378	0.2836	0.3275	0.3899	0.3920	Lin1	-0.149	0.4191							0.9940		0.9900
Ethyl methacrylate	0.2322 0.4119	0.2785	0.3255	0.3924	0.3890	Lin1	-0.137	0.4039							0.9970		0.9900
1,1,2-Trichloroethane	0.3195 0.3240	0.3205	0.3208	0.3514	0.3121	Ave		0.3247				4.2		15.0			
Tetrachloroethene	0.3107 0.3316	0.3183	0.3175	0.3432	0.3252	Ave		0.3244				3.6		15.0			
1,3-Dichloropropane	0.5419 0.5897	0.5671	0.5817	0.6367	0.5767	Ave		0.5823				5.4		15.0			
2-Hexanone	0.2066 0.2810	0.2114	0.2595	0.2880	0.2778	Ave		0.2541				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 15:24 Calibration End Date: 07/25/2014 17:17 Calibration ID: 23461

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	0.2222 0.3315	0.2332	0.2597	0.3073	0.2984	Lin1	-0.091	0.3190							0.9960		0.9900
1,2-Dibromoethane	0.2684 0.3120	0.2836	0.2950	0.3291	0.2988	Ave		0.2978				7.1		15.0			
Chlorobenzene	1.0636 1.1165	1.0661	1.0766	1.1535	1.0750	Ave		1.0919			0.3000	3.3		15.0			
1,1,1,2-Tetrachloroethane	0.2881 0.3576	0.2880	0.3103	0.3552	0.3363	Ave		0.3226				9.8		15.0			
Ethylbenzene	0.4645 0.6162	0.4956	0.5524	0.6283	0.5806	Ave		0.5563				12.0		15.0			
m-Xylene & p-Xylene	0.5331 0.7556	0.6035	0.6836	0.7744	0.7192	Ave		0.6782				14.0		15.0			
o-Xylene	0.4435 0.7328	0.5595	0.6489	0.7256	0.6936	Lin1	-0.189	0.7246							0.9990		0.9900
Styrene	0.7273 1.1929	0.8442	1.0272	1.1694	1.1218	Lin1	-0.336	1.1748							0.9980		0.9900
Bromoform	0.1281 0.1872	0.1344	0.1366	0.1643	0.1639	Ave		0.1524			0.1000	15.0		15.0			
Isopropylbenzene	1.1663 1.9639	1.4029	1.5893	1.8554	1.8207	Lin1	-0.588	1.9146							0.9970		0.9900
1,1,2,2-Tetrachloroethane	0.7063 0.7115	0.6883	0.6781	0.7524	0.6856	Ave		0.7037			0.3000	3.8		15.0			
Bromobenzene	0.7428 0.8284	0.7293	0.7549	0.8374	0.7932	Ave		0.7810				5.8		15.0			
1,2,3-Trichloropropane	0.2413 0.2375	0.2181	0.2322	0.2503	0.2352	Ave		0.2358				4.5		15.0			
trans-1,4-Dichloro-2-butene	0.1377 0.2452	0.1842	0.1958	0.2152	0.2155	Lin1	-0.073	0.2339							0.9950		0.9900
n-Propylbenzene	0.6303 0.9522	0.7159	0.8187	0.9581	0.9043	Lin1	-0.234	0.9419							0.9980		0.9900
2-Chlorotoluene	0.6336 0.7906	0.6471	0.7130	0.8197	0.7706	Ave		0.7291				11.0		15.0			
1,3,5-Trimethylbenzene	1.6753 2.8717	2.1548	2.3917	2.7710	2.6895	Lin1	-0.819	2.8179							0.9980		0.9900
4-Chlorotoluene	0.6363 0.8490	0.7535	0.7889	0.8762	0.8174	Ave		0.7869				11.0		15.0			
tert-Butylbenzene	1.5567 2.5290	1.7861	2.0345	2.3787	2.3547	Lin1	-0.748	2.4652							0.9970		0.9900
1,2,4-Trimethylbenzene	1.7276 3.0039	2.2344	2.5853	2.9015	2.7927	Lin1	-0.847	2.9466							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 15:24 Calibration End Date: 07/25/2014 17:17 Calibration ID: 23461

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	2.1727 3.4947	2.6359	2.8591	3.3315	3.2483	Lin1	-0.949	3.4118							0.9980		0.9900
1,3-Dichlorobenzene	1.4742 1.6142	1.5131	1.4898	1.6380	1.5495	Ave		1.5465				4.3		15.0			
p-Isopropyltoluene	1.7419 3.0904	2.1926	2.5160	2.9084	2.8876	Lin1	-0.970	3.0207							0.9980		0.9900
1,4-Dichlorobenzene	1.6981 1.6326	1.5438	1.5107	1.6587	1.5766	Ave		1.6034				4.5		15.0			
n-Butylbenzene	1.6423 2.5046	1.7051	1.9574	2.3005	2.3151	Lin1	-0.739	2.4251							0.9960		0.9900
1,2-Dichlorobenzene	1.4999 1.5360	1.3977	1.4400	1.5692	1.4623	Ave		1.4842				4.3		15.0			
1,2-Dibromo-3-Chloropropane	0.0840 0.1057	0.0813	0.0859	0.0950	0.0961	Ave		0.0913				10.0		15.0			
1,2,4-Trichlorobenzene	0.8417 0.9068	0.7679	0.8019	0.8246	0.8820	Ave		0.8375				6.1		15.0			
Hexachlorobutadiene	0.5049 0.3728	0.3797	0.3823	0.3675	0.3723	Ave		0.3966				13.0		15.0			
Naphthalene	1.2110 2.0625	1.2541	1.5733	1.8332	2.0803	Lin1	-0.773	2.0394							0.9950		0.9900
1,2,3-Trichlorobenzene	0.8230 0.7817	0.7297	0.8401	0.7915	0.8351	Ave		0.8002				5.2		15.0			
Dibromofluoromethane (Surr)	0.2716 0.2480	0.2301	0.2400	0.2477	0.2407	Ave		0.2464				5.7		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3629 0.3396	0.3338	0.3279	0.3417	0.3270	Ave		0.3388				3.9		15.0			
Toluene-d8 (Surr)	1.1693 1.5062	1.3479	1.4091	1.4598	1.4323	Ave		1.3874				8.6		15.0			
4-Bromofluorobenzene (Surr)	0.4630 0.5283	0.4517	0.4884	0.5158	0.5039	Ave		0.4918				6.1		15.0			

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

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 17:40 Calibration End Date: 07/25/2014 19:32 Calibration ID: 23463

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-140162/13	UXR4851.D
Level 2	STDA9 240-140162/12	UXR4850.D
Level 3	STDA9 240-140162/11	UXR4849.D
Level 4	STDA9 240-140162/10	UXR4848.D
Level 5	STDA9 240-140162/9	UXR4847.D
Level 6	STDA9 240-140162/8	UXR4846.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	0.0464 0.0440	0.0440	0.0434	0.0434	0.0459	Ave		0.0445				2.9		15.0			
Diisopropyl ether	0.1933 0.2518	0.1925	0.2156	0.2242	0.2449	Ave		0.2204				11.0		15.0			
2-Chloro-1,3-butadiene	0.4560 0.5879	0.4393	0.4961	0.5261	0.5715	Ave		0.5128				12.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.7119 0.8972	0.6671	0.7618	0.7919	0.8585	Ave		0.7814				11.0		15.0			
Ethyl acetate	0.2415 0.2920	0.2280	0.2570	0.2665	0.2889	Ave		0.2623				9.7		15.0			
Propionitrile	0.0493 0.0537	0.0440	0.0495	0.0494	0.0538	Ave		0.0500				7.2		15.0			
Methacrylonitrile	0.2006 0.2374	0.1934	0.2150	0.2204	0.2405	Ave		0.2179				8.7		15.0			
Tert-amyl-methyl ether (TAME)	0.4613 0.5889	0.4382	0.4751	0.5103	0.5715	Ave		0.5076				12.0		15.0			
n-Butanol	0.0075 0.0099	0.0067	0.0073	0.0083	0.0095	Lin1	-0.117	0.0096							0.9950		0.9900
Ethyl acrylate	0.2651 0.4280	0.2657	0.3263	0.3502	0.4093	Lin1	-0.253	0.4199							0.9950		0.9900
Methyl methacrylate	0.2123 0.3231	0.2050	0.2452	0.2788	0.3108	Lin1	-0.359	0.3187							0.9960		0.9900
2-Nitropropane	0.0482 0.0646	0.0448	0.0447	0.0483	0.0570	Ave		0.0513				15.0		15.0			
Cyclohexanone	0.0177 0.0225	0.0150	0.0166	0.0174	0.0212	Lin1	-0.106	0.0217							0.9910		0.9900
Pentachloroethane	0.1783 0.2411	0.1661	0.1863	0.2025	0.2260	Ave		0.2001				14.0		15.0			
1,2,3-Trimethylbenzene	2.2357 3.2298	2.1347	2.4815	2.7692	3.0692	Lin1	-1.645	3.1673							0.9960		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 17:40 Calibration End Date: 07/25/2014 19:32 Calibration ID: 23463

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								
Benzyl chloride	0.0922 0.1966	0.0831	0.1007	0.1162	0.1499	Qua	-0.048	0.1022	0.0024						1.0000		0.9900
1,3,5-Trichlorobenzene	1.1648 1.0777	1.0552	1.0994	1.0998	1.1560	Ave		1.1088				3.9		15.0			
2-Methylnaphthalene	0.4898 0.9880	0.4853	0.6979	0.9901	1.2889	Qua	-5.135	1.5788	-0.006						0.9900		0.9900
n-Butyl acetate	0.1494 0.2624	0.1425	0.1664	0.1966	0.2341	Qua	-0.148	0.2062	0.0015						1.0000		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.: 240-40408-1

SDG No.:

Lab Sample ID: ICV 240-140162/14 Calibration Date: 07/25/2014 19:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR4852.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	0.3712	0.2903		1.00	0.0100	-21.8	50.0
Chloromethane	Ave	0.5145	0.4643	0.1000	1.00	0.0100	-9.8	50.0
Vinyl chloride	Ave	0.4126	0.3846		1.00	0.0100	-6.8	20.0
Butadiene	Ave	0.3007	0.2617		0.00870	0.0100	-13.0	50.0
Bromomethane	Ave	0.0989	0.0767		1.00	0.0100	-22.5	50.0
Chloroethane	Lin1		0.1335		1.00	0.0100	-10.5	50.0
Dichlorofluoromethane	Ave	0.3405	0.3131		2.00	0.0100	-8.0	50.0
Trichlorofluoromethane	Ave	0.3133	0.2822		1.00	0.0100	-10.0	50.0
Ethyl ether	Ave	0.3059	0.3122		2.00	0.0100	2.1	50.0
Acrolein	Ave	0.0286	0.0196		20.0	0.0500	-31.2	50.0
1,1-Dichloroethene	Ave	0.2775	0.2691		1.00	0.0100	-3.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2155	0.1912		1.00	0.0100	-11.3	50.0
Acetone	Lin1		0.1102		10.0	0.0200	-8.3	50.0
Iodomethane	Ave	0.3277	0.3457		1.00	0.0100	5.5	50.0
Carbon disulfide	Ave	0.6513	0.7016		1.00	0.0100	7.7	50.0
3-Chloro-1-propene	Ave	0.1343	0.1301		2.00	0.0100	-3.1	50.0
Methyl acetate	Ave	0.2504	0.2472		10.0	0.0500	-1.3	50.0
Methylene Chloride	Lin1		0.2987		1.00	0.0100	3.2	50.0
tert-Butyl alcohol	Ave	0.0175	0.0173		50.0	0.100	-1.0	50.0
Acrylonitrile	Ave	0.1304	0.1326		20.0	0.100	1.7	50.0
Methyl tert-butyl ether	Ave	0.6446	0.6717		1.00	0.0100	4.2	50.0
trans-1,2-Dichloroethene	Ave	0.2861	0.2946		1.00	0.0100	2.9	50.0
Hexane	Ave	0.0746	0.0741		1.00	0.0100	-0.7	20.0
1,1-Dichloroethane	Ave	0.5595	0.5928	0.1000	1.00	0.0100	6.0	50.0
Vinyl acetate	Lin1		0.5440		2.00	0.00800	21.6	50.0
2,2-Dichloropropane	Ave	0.1628	0.1590		1.00	0.0100	-2.3	50.0
cis-1,2-Dichloroethene	Ave	0.2910	0.3026		1.00	0.0100	4.0	50.0
2-Butanone	Ave	0.1519	0.1476		10.0	0.0200	-2.8	50.0
Bromochloromethane	Ave	0.1455	0.1523		1.00	0.0100	4.7	50.0
Tetrahydrofuran	Lin1		0.0903		5.00	0.0200	0.4	50.0
Chloroform	Ave	0.4604	0.4761		1.00	0.0100	3.4	20.0
1,1,1-Trichloroethane	Ave	0.2864	0.3040		1.00	0.0100	6.2	50.0
Cyclohexane	Ave	0.5708	0.5687		1.00	0.0100	-0.4	50.0
1,1-Dichloropropene	Ave	0.3527	0.3899		1.00	0.0100	10.6	50.0
Carbon tetrachloride	Ave	0.2832	0.3005		1.00	0.0100	6.1	50.0
Isobutyl alcohol	Ave	0.0125	0.0120		50.0	0.250	-3.4	50.0
Benzene	Ave	1.180	1.200		1.00	0.0100	1.6	50.0
1,2-Dichloroethane	Ave	0.4303	0.4434		1.00	0.0100	3.0	50.0
n-Heptane	Ave	0.0659	0.0639		1.00	0.0100	-3.0	50.0
Trichloroethene	Ave	0.3049	0.3080		1.00	0.0100	1.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: ICV 240-140162/14 Calibration Date: 07/25/2014 19:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR4852.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	0.4268	0.4085		1.00	0.0100	-4.3	50.0
1,2-Dichloropropane	Ave	0.3133	0.3191		1.00	0.0100	1.8	20.0
1,4-Dioxane	Ave	0.0024	0.0023		50.0	0.200	-4.7	50.0
Dibromomethane	Ave	0.1509	0.1558		1.00	0.0100	3.2	50.0
Bromodichloromethane	Ave	0.3004	0.3026		1.00	0.0100	0.7	50.0
2-Chloroethyl vinyl ether	Lin1		0.1715		10.0	0.0120	-6.7	50.0
cis-1,3-Dichloropropene	Lin1		0.3517		1.00	0.0100	-3.6	50.0
4-Methyl-2-pentanone	Ave	0.2625	0.2824		10.0	0.0200	7.6	50.0
Toluene	Ave	1.639	1.706		1.00	0.0100	4.1	20.0
trans-1,3-Dichloropropene	Lin1		0.4025		1.00	0.0100	-0.4	50.0
Ethyl methacrylate	Lin1		0.3970		1.00	0.0100	1.7	50.0
1,1,2-Trichloroethane	Ave	0.3247	0.3199		1.00	0.0100	-1.5	50.0
Tetrachloroethene	Ave	0.3244	0.3279		1.00	0.0100	1.1	50.0
1,3-Dichloropropane	Ave	0.5823	0.5812		1.00	0.0100	-0.2	50.0
2-Hexanone	Ave	0.2541	0.2572		10.0	0.0200	1.3	50.0
Dibromochloromethane	Lin1		0.2848		1.00	0.0100	-7.9	50.0
1,2-Dibromoethane	Ave	0.2978	0.3098		1.00	0.0100	4.0	50.0
Chlorobenzene	Ave	1.092	1.087	0.3000	1.00	0.0100	-0.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3226	0.3314		1.00	0.0100	2.7	50.0
Ethylbenzene	Ave	0.5563	0.5691		1.00	0.0100	2.3	20.0
m-Xylene & p-Xylene	Ave	0.6782	0.7200		2.00	0.0100	6.2	50.0
o-Xylene	Lin1		0.6909		1.00	0.0100	-2.1	50.0
Styrene	Lin1		1.139		1.00	0.0100	-0.2	50.0
Bromoform	Ave	0.1524	0.1516	0.1000	1.00	0.0100	-0.6	50.0
Isopropylbenzene	Lin1		1.723		1.00	0.0100	-6.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7037	0.7190	0.3000	1.00	0.0100	2.2	50.0
Bromobenzene	Ave	0.7810	0.7932		1.00	0.0100	1.6	50.0
1,2,3-Trichloropropane	Ave	0.2358	0.2527		1.00	0.0100	7.2	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.2094		1.00	0.0100	-7.3	50.0
n-Propylbenzene	Lin1		0.8795		1.00	0.0100	-4.1	50.0
2-Chlorotoluene	Ave	0.7291	0.7588		1.00	0.0100	4.1	50.0
1,3,5-Trimethylbenzene	Lin1		2.621		1.00	0.0100	-4.1	50.0
4-Chlorotoluene	Ave	0.7869	0.8274		1.00	0.0100	5.1	50.0
tert-Butylbenzene	Lin1		2.230		1.00	0.0100	-6.5	50.0
1,2,4-Trimethylbenzene	Lin1		2.676		1.00	0.0100	-6.3	50.0
sec-Butylbenzene	Lin1		3.021		1.00	0.0100	-8.7	50.0
1,3-Dichlorobenzene	Ave	1.546	1.537		1.00	0.0100	-0.6	50.0
p-Isopropyltoluene	Lin1		2.699		1.00	0.0100	-7.4	50.0
1,4-Dichlorobenzene	Ave	1.603	1.577		1.00	0.0100	-1.6	50.0
n-Butylbenzene	Lin1		2.079		1.00	0.0100	-11.2	50.0
1,2-Dichlorobenzene	Ave	1.484	1.467		1.00	0.0100	-1.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: ICV 240-140162/14 Calibration Date: 07/25/2014 19:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR4852.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	0.0913	0.0962		2.00	0.0100	5.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8375	0.7653		1.00	0.0100	-8.6	50.0
Hexachlorobutadiene	Ave	0.3966	0.3054		1.00	0.0100	-23.0	50.0
Naphthalene	Lin1		1.638		1.00	0.0100	-15.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8002	0.6980		1.00	0.0100	-12.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2464	0.2331		0.00946	0.0100	-5.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3388	0.3182		0.00939	0.0100	-6.1	50.0
Toluene-d8 (Surr)	Ave	1.387	1.347		0.00971	0.0100	-2.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4918	0.4668		0.00949	0.0100	-5.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: ICV 240-140162/15 Calibration Date: 07/25/2014 20:16

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 17:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 19:32

Lab File ID: UXR4853.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	0.0445	0.0388		20.0	0.100	-12.9	50.0
Diisopropyl ether	Ave	0.2204	0.2180		10.0	0.0100	-1.1	50.0
2-Chloro-1,3-butadiene	Ave	0.5128	0.4955		2.00	0.0100	-3.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7814	0.7398		5.00	0.0100	-5.3	50.0
Ethyl acetate	Ave	0.2623	0.1691		4.00	0.0200	-35.5	50.0
Propionitrile	Ave	0.0500	0.0473		4.00	0.100	-5.4	50.0
Methacrylonitrile	Ave	0.2179	0.2069		2.00	0.100	-5.0	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5076	0.4779		5.00	0.0100	-5.8	50.0
n-Butanol	Lin1		0.0071		50.0	0.250	-21.7	50.0
Ethyl acrylate	Lin1		0.3244		1.00	0.0100	-16.7	50.0
Methyl methacrylate	Lin1		0.2585		2.00	0.0200	-13.3	50.0
2-Nitropropane	Ave	0.0513	0.0423		2.00	0.0200	-17.5	50.0
Cyclohexanone	Lin1		0.0157		20.0	0.100	-22.8	50.0
Pentachloroethane	Ave	0.2001	0.1655		0.0165	0.0200	-17.3	50.0
1,2,3-Trimethylbenzene	Lin1		2.613		0.00877	0.0100	-12.3	50.0
Benzyl chloride	Qua		0.1022		1.00	0.0100	-13.1	50.0
1,3,5-Trichlorobenzene	Ave	1.109	1.006		1.00	0.0100	-9.3	50.0
2-Methylnaphthalene	Qua		0.5979		5.00	0.0200	-43.2	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: BFB231.D BFB Injection Date: 08/11/2014

Instrument ID: A3UX17 BFB Injection Time: 12:02

Analysis Batch No.: 142307

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.6	
75	30.0 - 60.0 % of mass 95	45.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.8	(0.9)1
174	50.0 - 120.00 % of mass 95	90.7	
175	5.0 - 9.0 % of mass 174	6.5	(7.1)1
176	95.0 - 101.0 % of mass 174	86.5	(95.3)1
177	5.0 - 9.0 % of mass 176	5.5	(6.3)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-142307/2	UXR5089.D	08/11/2014	12:30
	CCV 240-142307/3	UXR5090.D	08/11/2014	12:52
	LCS 240-142307/4	UXR5091.D	08/11/2014	13:15
	MB 240-142307/6	UXR5093.D	08/11/2014	14:01
MSA-SW37A-080514	240-40408-1	UXR5096.D	08/11/2014	15:15
MSA-SW37B-080514	240-40408-2	UXR5097.D	08/11/2014	15:38
MSA-SW37C-080514	240-40408-3	UXR5098.D	08/11/2014	16:01
MSA-SW37D-080514	240-40408-4	UXR5099.D	08/11/2014	16:24
MSA-SW38A-080514	240-40408-5	UXR5100.D	08/11/2014	16:46
MSA-SW38B-080514	240-40408-6	UXR5101.D	08/11/2014	17:09
MSA-SW38C-080514	240-40408-7	UXR5102.D	08/11/2014	17:32
MSA-SW38D-080514	240-40408-8	UXR5103.D	08/11/2014	17:54
MSA-SW39A-080514	240-40408-9	UXR5104.D	08/11/2014	18:17
MSA-SW39B-080514	240-40408-10	UXR5105.D	08/11/2014	18:40
MSA-SW39C-080514	240-40408-11	UXR5106.D	08/11/2014	19:02
MSA-SW39D-080514	240-40408-12	UXR5107.D	08/11/2014	19:25
MSA-SW40A-080514	240-40408-13	UXR5108.D	08/11/2014	19:48
MSA-SW40B-080514	240-40408-14	UXR5109.D	08/11/2014	20:11
MSA-SW40C-080514	240-40408-15	UXR5110.D	08/11/2014	20:33
MSA-SW40D-080514	240-40408-16	UXR5111.D	08/11/2014	20:56
MSA-SW41A-080514	240-40408-17	UXR5112.D	08/11/2014	21:19
	240-40400-C-5 MS	UXR5114.D	08/11/2014	22:04
	240-40400-A-5 MSD	UXR5115.D	08/11/2014	22:26

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142307/2 Calibration Date: 08/11/2014 12:30

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5089.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	0.3712	0.3793		1.00	0.0100	2.2	50.0
Chloromethane	Ave	0.5145	0.5109	0.1000	1.00	0.0100	-0.7	50.0
Vinyl chloride	Ave	0.4126	0.4072		1.00	0.0100	-1.3	20.0
Butadiene	Ave	0.3007	0.4059		0.0135	0.0100	35.0	50.0
Bromomethane	Ave	0.0989	0.1180		1.00	0.0100	19.3	50.0
Chloroethane	Lin1		0.1565		1.00	0.0100	5.4	50.0
Dichlorofluoromethane	Ave	0.3405	0.3411		2.00	0.0100	0.2	50.0
Trichlorofluoromethane	Ave	0.3133	0.3409		1.00	0.0100	8.8	50.0
Ethyl ether	Ave	0.3059	0.3012		2.00	0.0100	-1.5	50.0
Acrolein	Ave	0.0286	0.0473		20.0	0.0500	65.5*	50.0
1,1-Dichloroethene	Ave	0.2775	0.2873		1.00	0.0100	3.5	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2155	0.2444		1.00	0.0100	13.4	50.0
Acetone	Lin1		0.1047		10.0	0.0200	-13.8	50.0
Iodomethane	Ave	0.3277	0.4067		1.00	0.0100	24.1	50.0
Carbon disulfide	Ave	0.6513	0.7960		1.00	0.0100	22.2	50.0
3-Chloro-1-propene	Ave	0.1343	0.1587		2.00	0.0100	18.2	50.0
Methyl acetate	Ave	0.2504	0.2432		10.0	0.0500	-2.9	50.0
Methylene Chloride	Lin1		0.3204		1.00	0.0100	11.1	50.0
tert-Butyl alcohol	Ave	0.0175	0.0167		50.0	0.100	-4.9	50.0
Acrylonitrile	Ave	0.1304	0.1341		20.0	0.100	2.8	50.0
Methyl tert-butyl ether	Ave	0.6446	0.6632		1.00	0.0100	2.9	50.0
trans-1,2-Dichloroethene	Ave	0.2861	0.3070		1.00	0.0100	7.3	50.0
Hexane	Ave	0.0746	0.0799		1.00	0.0100	7.1	20.0
1,1-Dichloroethane	Ave	0.5595	0.5802	0.1000	1.00	0.0100	3.7	50.0
Vinyl acetate	Lin1		0.4385		2.00	0.00960	-1.9	50.0
2,2-Dichloropropane	Ave	0.1628	0.1958		1.00	0.0100	20.3	50.0
cis-1,2-Dichloroethene	Ave	0.2910	0.3154		1.00	0.0100	8.4	50.0
2-Butanone	Ave	0.1519	0.1489		10.0	0.0200	-2.0	50.0
Bromochloromethane	Ave	0.1455	0.1620		1.00	0.0100	11.3	50.0
Tetrahydrofuran	Lin1		0.0842		5.00	0.0200	-6.4	50.0
Chloroform	Ave	0.4604	0.4843		1.00	0.0100	5.2	20.0
1,1,1-Trichloroethane	Ave	0.2864	0.3232		1.00	0.0100	12.9	50.0
Cyclohexane	Ave	0.5708	0.6322		1.00	0.0100	10.8	50.0
1,1-Dichloropropene	Ave	0.3527	0.3832		1.00	0.0100	8.7	50.0
Carbon tetrachloride	Ave	0.2832	0.3316		1.00	0.0100	17.1	50.0
Isobutyl alcohol	Ave	0.0125	0.0107		50.0	0.250	-14.4	50.0
Benzene	Ave	1.180	1.224		1.00	0.0100	3.7	50.0
1,2-Dichloroethane	Ave	0.4303	0.4201		1.00	0.0100	-2.4	50.0
n-Heptane	Ave	0.0659	0.0737		1.00	0.0100	11.7	50.0
Trichloroethene	Ave	0.3049	0.3307		1.00	0.0100	8.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142307/2 Calibration Date: 08/11/2014 12:30

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5089.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	0.4268	0.4696		1.00	0.0100	10.0	50.0
1,2-Dichloropropane	Ave	0.3133	0.3334		1.00	0.0100	6.4	20.0
1,4-Dioxane	Ave	0.0024	0.0025		50.0	0.200	4.3	50.0
Dibromomethane	Ave	0.1509	0.1560		1.00	0.0100	3.4	50.0
Bromodichloromethane	Ave	0.3004	0.3368		1.00	0.0100	12.1	50.0
2-Chloroethyl vinyl ether	Lin1		0.1737		10.0	0.0200	-7.6	50.0
cis-1,3-Dichloropropene	Lin1		0.3728		1.00	0.0100	1.9	50.0
4-Methyl-2-pentanone	Ave	0.2625	0.2727		10.0	0.0200	3.9	50.0
Toluene	Ave	1.639	1.802		1.00	0.0100	10.0	20.0
trans-1,3-Dichloropropene	Lin1		0.4021		1.00	0.0100	-0.5	50.0
Ethyl methacrylate	Lin1		0.3928		1.00	0.0100	0.6	50.0
1,1,2-Trichloroethane	Ave	0.3247	0.3360		1.00	0.0100	3.5	50.0
Tetrachloroethene	Ave	0.3244	0.3713		1.00	0.0100	14.4	50.0
1,3-Dichloropropane	Ave	0.5823	0.5951		1.00	0.0100	2.2	50.0
2-Hexanone	Ave	0.2541	0.2643		10.0	0.0200	4.0	50.0
Dibromochloromethane	Lin1		0.3337		1.00	0.0100	7.5	50.0
1,2-Dibromoethane	Ave	0.2978	0.3181		1.00	0.0100	6.8	50.0
Chlorobenzene	Ave	1.092	1.173	0.3000	1.00	0.0100	7.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3226	0.3674		1.00	0.0100	13.9	50.0
Ethylbenzene	Ave	0.5563	0.6252		1.00	0.0100	12.4	20.0
m-Xylene & p-Xylene	Ave	0.6782	0.7858		2.00	0.0100	15.9	50.0
o-Xylene	Lin1		0.7313		1.00	0.0100	3.5	50.0
Styrene	Lin1		1.183		1.00	0.0100	3.6	50.0
Bromoform	Ave	0.1524	0.2034	0.1000	1.00	0.0100	33.4	50.0
Isopropylbenzene	Lin1		1.878		1.00	0.0100	1.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7037	0.6646	0.3000	1.00	0.0100	-5.6	50.0
Bromobenzene	Ave	0.7810	0.8507		1.00	0.0100	8.9	50.0
1,2,3-Trichloropropane	Ave	0.2358	0.2260		1.00	0.0100	-4.1	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.2156		1.00	0.0100	-4.7	50.0
n-Propylbenzene	Lin1		0.9348		1.00	0.0100	1.7	50.0
2-Chlorotoluene	Ave	0.7291	0.7796		1.00	0.0100	6.9	50.0
1,3,5-Trimethylbenzene	Lin1		2.657		1.00	0.0100	-2.8	50.0
4-Chlorotoluene	Ave	0.7869	0.8372		1.00	0.0100	6.4	50.0
tert-Butylbenzene	Lin1		2.325		1.00	0.0100	-2.7	50.0
1,2,4-Trimethylbenzene	Lin1		2.790		1.00	0.0100	-2.4	50.0
sec-Butylbenzene	Lin1		3.150		1.00	0.0100	-4.9	50.0
1,3-Dichlorobenzene	Ave	1.546	1.640		1.00	0.0100	6.1	50.0
p-Isopropyltoluene	Lin1		2.837		1.00	0.0100	-2.9	50.0
1,4-Dichlorobenzene	Ave	1.603	1.658		1.00	0.0100	3.4	50.0
n-Butylbenzene	Lin1		2.150		1.00	0.0100	-8.3	50.0
1,2-Dichlorobenzene	Ave	1.484	1.563		1.00	0.0100	5.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142307/2 Calibration Date: 08/11/2014 12:30

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5089.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	0.0913	0.1045		2.00	0.0100	14.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8375	0.8996		1.00	0.0100	7.4	50.0
Hexachlorobutadiene	Ave	0.3966	0.3991		1.00	0.0100	0.6	50.0
Naphthalene	Lin1		1.756		1.00	0.0100	-10.1	50.0
1,2,3-Trichlorobenzene	Ave	0.8002	0.8384		1.00	0.0100	4.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2464	0.2361		0.00854	0.00891	-4.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3388	0.2923		0.00769	0.00891	-13.7	50.0
Toluene-d8 (Surr)	Ave	1.387	1.372		0.00882	0.00891	-1.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4918	0.4924		0.00892	0.00891	0.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCV 240-142307/3 Calibration Date: 08/11/2014 12:52

Instrument ID: A3UX17 Calib Start Date: 03/21/2014 01:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/21/2014 02:54

Lab File ID: UXR5090.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1-Chlorohexane	Lin1		0.3998			0.0100		50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCV 240-142307/3 Calibration Date: 08/11/2014 12:52

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 17:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 19:32

Lab File ID: UXR5090.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	0.0445	0.0407		20.0	0.100	-8.7	50.0
Diisopropyl ether	Ave	0.2204	0.2338		10.0	0.0100	6.1	50.0
2-Chloro-1,3-butadiene	Ave	0.5128	0.5276		2.00	0.0100	2.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7814	0.7917		5.00	0.0100	1.3	50.0
Ethyl acetate	Ave	0.2623	0.0954		4.00	0.0200	-63.6*	50.0
Propionitrile	Ave	0.0500	0.0475		4.00	0.100	-5.0	50.0
Methacrylonitrile	Ave	0.2179	0.2011		2.00	0.100	-7.7	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5076	0.5652		5.00	0.0100	11.4	50.0
n-Butanol	Lin1		0.0065		50.0	0.250	-27.2	50.0
Ethyl acrylate	Lin1		0.3453		1.00	0.0100	-11.7	50.0
Methyl methacrylate	Lin1		0.2502		2.00	0.0200	-15.8	50.0
2-Nitropropane	Ave	0.0513	0.0444		2.00	0.0200	-13.4	50.0
Cyclohexanone	Lin1		0.0196		20.0	0.100	-4.9	50.0
Pentachloroethane	Ave	0.2001	0.2187		0.0219	0.0200	9.3	50.0
1,2,3-Trimethylbenzene	Lin1		2.635		0.00884	0.0100	-11.6	50.0
Benzyl chloride	Qua		0.1418		1.00	0.0100	13.3	50.0
1,3,5-Trichlorobenzene	Ave	1.109	1.079		1.00	0.0100	-2.7	50.0
2-Methylnaphthalene	Qua		0.5380		5.00	0.0200	-47.4	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: UXR5093.D Lab Sample ID: MB 240-142307/6

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

Instrument ID: A3UX17 Date Analyzed: 08/11/2014 14:01

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-142307/4	UXR5091.D	08/11/2014 13:15
MSA-SW37A-080514	240-40408-1	UXR5096.D	08/11/2014 15:15
MSA-SW37B-080514	240-40408-2	UXR5097.D	08/11/2014 15:38
MSA-SW37C-080514	240-40408-3	UXR5098.D	08/11/2014 16:01
MSA-SW37D-080514	240-40408-4	UXR5099.D	08/11/2014 16:24
MSA-SW38A-080514	240-40408-5	UXR5100.D	08/11/2014 16:46
MSA-SW38B-080514	240-40408-6	UXR5101.D	08/11/2014 17:09
MSA-SW38C-080514	240-40408-7	UXR5102.D	08/11/2014 17:32
MSA-SW38D-080514	240-40408-8	UXR5103.D	08/11/2014 17:54
MSA-SW39A-080514	240-40408-9	UXR5104.D	08/11/2014 18:17
MSA-SW39B-080514	240-40408-10	UXR5105.D	08/11/2014 18:40
MSA-SW39C-080514	240-40408-11	UXR5106.D	08/11/2014 19:02
MSA-SW39D-080514	240-40408-12	UXR5107.D	08/11/2014 19:25
MSA-SW40A-080514	240-40408-13	UXR5108.D	08/11/2014 19:48
MSA-SW40B-080514	240-40408-14	UXR5109.D	08/11/2014 20:11
MSA-SW40C-080514	240-40408-15	UXR5110.D	08/11/2014 20:33
MSA-SW40D-080514	240-40408-16	UXR5111.D	08/11/2014 20:56
MSA-SW41A-080514	240-40408-17	UXR5112.D	08/11/2014 21:19
	240-40400-C-5 MS	UXR5114.D	08/11/2014 22:04
	240-40400-A-5 MSD	UXR5115.D	08/11/2014 22:26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-142307/6

Matrix: Water Lab File ID: UXR5093.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 14:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142307/6

Matrix: Water | Lab File ID: UXR5093.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 14:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142307/6

Matrix: Water | Lab File ID: UXR5093.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/11/2014 14:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142307 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	86		75-121
2037-26-5	Toluene-d8 (Surr)	82		74-120

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: BFB235.D BFB Injection Date: 08/12/2014

Instrument ID: A3UX17 BFB Injection Time: 12:29

Analysis Batch No.: 142484

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.1	
75	30.0 - 60.0 % of mass 95	41.0	
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	0.7	(0.7)1
174	50.0 - 120.00 % of mass 95	106.4	
175	5.0 - 9.0 % of mass 174	7.6	(7.1)1
176	95.0 - 101.0 % of mass 174	105.9	(99.5)1
177	5.0 - 9.0 % of mass 176	6.6	(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 240-142484/2	UXR5116.D	08/12/2014	12:54
	CCV 240-142484/3	UXR5117.D	08/12/2014	13:17
	LCS 240-142484/4	UXR5118.D	08/12/2014	13:40
	MB 240-142484/6	UXR5120.D	08/12/2014	14:25
MSA-SW41C-080514	240-40408-19	UXR5122.D	08/12/2014	15:21
MSA-SW41D-080514	240-40408-20	UXR5123.D	08/12/2014	15:43
MSA-SW42A-080514	240-40408-21	UXR5124.D	08/12/2014	16:06
MSA-SW42B-080514	240-40408-22	UXR5125.D	08/12/2014	16:29
MSA-SW42C-080514	240-40408-23	UXR5126.D	08/12/2014	16:51
MSA-SW42D-080514	240-40408-24	UXR5127.D	08/12/2014	17:14
MSA-SW43A-080514	240-40408-25	UXR5128.D	08/12/2014	17:36
MSA-SW43B-080514	240-40408-26	UXR5129.D	08/12/2014	17:59
MSA-SW43C-080514	240-40408-27	UXR5130.D	08/12/2014	18:22
MSA-SW43D-080514	240-40408-28	UXR5131.D	08/12/2014	18:44
MSA-SW44A-080514	240-40408-29	UXR5132.D	08/12/2014	19:07
MSA-SW44B-080514	240-40408-30	UXR5133.D	08/12/2014	19:30
MSA-SW44C-080514	240-40408-31	UXR5134.D	08/12/2014	19:52
MSA-SW44D-080514	240-40408-32	UXR5135.D	08/12/2014	20:15
MSA-SW45A-080514	240-40408-33	UXR5136.D	08/12/2014	20:38
MSA-SW45B-080514	240-40408-34	UXR5137.D	08/12/2014	21:00
MSA-SW45C-080514	240-40408-35	UXR5138.D	08/12/2014	21:23
MSA-SW45D-080514	240-40408-36	UXR5139.D	08/12/2014	21:46
EL-SW01A-080514	240-40408-37	UXR5140.D	08/12/2014	22:08
	240-40448-B-8 MS	UXR5141.D	08/12/2014	22:31
	240-40448-E-8 MSD	UXR5142.D	08/12/2014	22:54

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142484/2 Calibration Date: 08/12/2014 12:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5116.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	0.3712	0.3446		1.00	0.0100	-7.2	50.0
Chloromethane	Ave	0.5145	0.4546	0.1000	1.00	0.0100	-11.6	50.0
Vinyl chloride	Ave	0.4126	0.3770		1.00	0.0100	-8.6	20.0
Butadiene	Ave	0.3007	0.3786		0.0126	0.0100	25.9	50.0
Bromomethane	Ave	0.0989	0.1031		1.00	0.0100	4.2	50.0
Chloroethane	Lin1		0.1370		1.00	0.0100	-8.1	50.0
Dichlorofluoromethane	Ave	0.3405	0.2945		2.00	0.0100	-13.5	50.0
Trichlorofluoromethane	Ave	0.3133	0.3061		1.00	0.0100	-2.3	50.0
Ethyl ether	Ave	0.3059	0.2561		2.00	0.0100	-16.3	50.0
Acrolein	Ave	0.0286	0.0408		20.0	0.0500	42.7	50.0
1,1-Dichloroethene	Ave	0.2775	0.2658		1.00	0.0100	-4.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2155	0.2223		1.00	0.0100	3.1	50.0
Acetone	Lin1		0.0799		10.0	0.0200	-38.2	50.0
Iodomethane	Ave	0.3277	0.3397		1.00	0.0100	3.7	50.0
Carbon disulfide	Ave	0.6513	0.6757		1.00	0.0100	3.7	50.0
3-Chloro-1-propene	Ave	0.1343	0.1356		2.00	0.0100	1.0	50.0
Methyl acetate	Ave	0.2504	0.2052		10.0	0.0500	-18.1	50.0
Methylene Chloride	Lin1		0.2816		1.00	0.0100	-3.0	50.0
tert-Butyl alcohol	Ave	0.0175	0.0143		50.0	0.100	-18.5	50.0
Acrylonitrile	Ave	0.1304	0.1144		20.0	0.100	-12.3	50.0
Methyl tert-butyl ether	Ave	0.6446	0.5666		1.00	0.0100	-12.1	50.0
trans-1,2-Dichloroethene	Ave	0.2861	0.2683		1.00	0.0100	-6.2	50.0
Hexane	Ave	0.0746	0.0743		1.00	0.0100	-0.4	20.0
1,1-Dichloroethane	Ave	0.5595	0.5105	0.1000	1.00	0.0100	-8.8	50.0
Vinyl acetate	Lin1		0.3622		2.00	0.00960	-18.5	50.0
2,2-Dichloropropane	Ave	0.1628	0.1631		1.00	0.0100	0.1	50.0
cis-1,2-Dichloroethene	Ave	0.2910	0.2820		1.00	0.0100	-3.1	50.0
2-Butanone	Ave	0.1519	0.1143		10.0	0.0200	-24.8	50.0
Bromochloromethane	Ave	0.1455	0.1415		1.00	0.0100	-2.7	50.0
Tetrahydrofuran	Lin1		0.0722		5.00	0.0200	-20.0	50.0
Chloroform	Ave	0.4604	0.4195		1.00	0.0100	-8.9	20.0
1,1,1-Trichloroethane	Ave	0.2864	0.2758		1.00	0.0100	-3.7	50.0
Cyclohexane	Ave	0.5708	0.5655		1.00	0.0100	-0.9	50.0
1,1-Dichloropropene	Ave	0.3527	0.3279		1.00	0.0100	-7.0	50.0
Carbon tetrachloride	Ave	0.2832	0.2873		1.00	0.0100	1.4	50.0
Isobutyl alcohol	Ave	0.0125	0.0095		50.0	0.250	-23.6	50.0
Benzene	Ave	1.180	1.089		1.00	0.0100	-7.7	50.0
1,2-Dichloroethane	Ave	0.4303	0.3606		1.00	0.0100	-16.2	50.0
n-Heptane	Ave	0.0659	0.0692		1.00	0.0100	4.9	50.0
Trichloroethene	Ave	0.3049	0.2952		1.00	0.0100	-3.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142484/2 Calibration Date: 08/12/2014 12:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5116.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	0.4268	0.4290		1.00	0.0100	0.5	50.0
1,2-Dichloropropane	Ave	0.3133	0.2838		1.00	0.0100	-9.4	20.0
1,4-Dioxane	Ave	0.0024	0.0022		50.0	0.200	-8.7	50.0
Dibromomethane	Ave	0.1509	0.1385		1.00	0.0100	-8.2	50.0
Bromodichloromethane	Ave	0.3004	0.2839		1.00	0.0100	-5.5	50.0
2-Chloroethyl vinyl ether	Lin1		0.1484		10.0	0.0200	-20.6	50.0
cis-1,3-Dichloropropene	Lin1		0.3170		1.00	0.0100	-12.8	50.0
4-Methyl-2-pentanone	Ave	0.2625	0.2239		10.0	0.0200	-14.7	50.0
Toluene	Ave	1.639	1.565		1.00	0.0100	-4.5	20.0
trans-1,3-Dichloropropene	Lin1		0.3333		1.00	0.0100	-16.9	50.0
Ethyl methacrylate	Lin1		0.3297		1.00	0.0100	-15.0	50.0
1,1,2-Trichloroethane	Ave	0.3247	0.2937		1.00	0.0100	-9.6	50.0
Tetrachloroethene	Ave	0.3244	0.3290		1.00	0.0100	1.4	50.0
1,3-Dichloropropane	Ave	0.5823	0.5224		1.00	0.0100	-10.3	50.0
2-Hexanone	Ave	0.2541	0.2102		10.0	0.0200	-17.2	50.0
Dibromochloromethane	Lin1		0.2829		1.00	0.0100	-8.5	50.0
1,2-Dibromoethane	Ave	0.2978	0.2718		1.00	0.0100	-8.7	50.0
Chlorobenzene	Ave	1.092	1.020	0.3000	1.00	0.0100	-6.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3226	0.3203		1.00	0.0100	-0.7	50.0
Ethylbenzene	Ave	0.5563	0.5536		1.00	0.0100	-0.5	20.0
m-Xylene & p-Xylene	Ave	0.6782	0.6840		2.00	0.0100	0.9	50.0
o-Xylene	Lin1		0.6521		1.00	0.0100	-7.4	50.0
Styrene	Lin1		1.050		1.00	0.0100	-7.8	50.0
Bromoform	Ave	0.1524	0.1714	0.1000	1.00	0.0100	12.5	50.0
Isopropylbenzene	Lin1		1.668		1.00	0.0100	-9.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7037	0.5708	0.3000	1.00	0.0100	-18.9	50.0
Bromobenzene	Ave	0.7810	0.7337		1.00	0.0100	-6.1	50.0
1,2,3-Trichloropropane	Ave	0.2358	0.1971		1.00	0.0100	-16.4	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1687		1.00	0.0100	-24.7	50.0
n-Propylbenzene	Lin1		0.8102		1.00	0.0100	-11.5	50.0
2-Chlorotoluene	Ave	0.7291	0.6801		1.00	0.0100	-6.7	50.0
1,3,5-Trimethylbenzene	Lin1		2.302		1.00	0.0100	-15.4	50.0
4-Chlorotoluene	Ave	0.7869	0.7340		1.00	0.0100	-6.7	50.0
tert-Butylbenzene	Lin1		2.034		1.00	0.0100	-14.4	50.0
1,2,4-Trimethylbenzene	Lin1		2.442		1.00	0.0100	-14.3	50.0
sec-Butylbenzene	Lin1		2.753		1.00	0.0100	-16.5	50.0
1,3-Dichlorobenzene	Ave	1.546	1.438		1.00	0.0100	-7.0	50.0
p-Isopropyltoluene	Lin1		2.496		1.00	0.0100	-14.2	50.0
1,4-Dichlorobenzene	Ave	1.603	1.444		1.00	0.0100	-9.9	50.0
n-Butylbenzene	Lin1		1.883		1.00	0.0100	-19.3	50.0
1,2-Dichlorobenzene	Ave	1.484	1.357		1.00	0.0100	-8.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142484/2 Calibration Date: 08/12/2014 12:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5116.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	0.0913	0.0881		2.00	0.0100	-3.5	50.0
1,2,4-Trichlorobenzene	Ave	0.8375	0.7653		1.00	0.0100	-8.6	50.0
Hexachlorobutadiene	Ave	0.3966	0.3593		1.00	0.0100	-9.4	50.0
Naphthalene	Lin1		1.455		1.00	0.0100	-24.9	50.0
1,2,3-Trichlorobenzene	Ave	0.8002	0.7282		1.00	0.0100	-9.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2464	0.2016		0.00729	0.00891	-18.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3388	0.2526		0.00664	0.00891	-25.5	50.0
Toluene-d8 (Surr)	Ave	1.387	1.179		0.00758	0.00891	-15.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4918	0.4301		0.00779	0.00891	-12.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCV 240-142484/3 Calibration Date: 08/12/2014 13:17

Instrument ID: A3UX17 Calib Start Date: 03/21/2014 01:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/21/2014 02:54

Lab File ID: UXR5117.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1-Chlorohexane	Lin1		0.3896			0.0100		50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCV 240-142484/3 Calibration Date: 08/12/2014 13:17

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 17:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 19:32

Lab File ID: UXR5117.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	0.0445	0.0418		20.0	0.100	-6.1	50.0
Diisopropyl ether	Ave	0.2204	0.2280		10.0	0.0100	3.4	50.0
2-Chloro-1,3-butadiene	Ave	0.5128	0.5272		2.00	0.0100	2.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7814	0.7703		5.00	0.0100	-1.4	50.0
Ethyl acetate	Ave	0.2623	0.0915		4.00	0.0200	-65.1*	50.0
Propionitrile	Ave	0.0500	0.0473		4.00	0.100	-5.3	50.0
Methacrylonitrile	Ave	0.2179	0.1947		2.00	0.100	-10.6	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5076	0.5492		5.00	0.0100	8.2	50.0
n-Butanol	Lin1		0.0067		50.0	0.250	-25.1	50.0
Ethyl acrylate	Lin1		0.3330		1.00	0.0100	-14.7	50.0
Methyl methacrylate	Lin1		0.2450		2.00	0.0200	-17.5	50.0
2-Nitropropane	Ave	0.0513	0.0419		2.00	0.0200	-18.3	50.0
Cyclohexanone	Lin1		0.0205		20.0	0.100	-0.6	50.0
Pentachloroethane	Ave	0.2001	0.2146		0.0215	0.0200	7.3	50.0
1,2,3-Trimethylbenzene	Lin1		2.691		0.00901	0.0100	-9.9	50.0
Benzyl chloride	Qua		0.1370		1.00	0.0100	10.2	50.0
1,3,5-Trichlorobenzene	Ave	1.109	1.107		1.00	0.0100	-0.1	50.0
2-Methylnaphthalene	Qua		0.5481		5.00	0.0200	-46.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: UXR5120.D Lab Sample ID: MB 240-142484/6

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

Instrument ID: A3UX17 Date Analyzed: 08/12/2014 14:25

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 240-142484/4	UXR5118.D	08/12/2014 13:40
MSA-SW41C-080514	240-40408-19	UXR5122.D	08/12/2014 15:21
MSA-SW41D-080514	240-40408-20	UXR5123.D	08/12/2014 15:43
MSA-SW42A-080514	240-40408-21	UXR5124.D	08/12/2014 16:06
MSA-SW42B-080514	240-40408-22	UXR5125.D	08/12/2014 16:29
MSA-SW42C-080514	240-40408-23	UXR5126.D	08/12/2014 16:51
MSA-SW42D-080514	240-40408-24	UXR5127.D	08/12/2014 17:14
MSA-SW43A-080514	240-40408-25	UXR5128.D	08/12/2014 17:36
MSA-SW43B-080514	240-40408-26	UXR5129.D	08/12/2014 17:59
MSA-SW43C-080514	240-40408-27	UXR5130.D	08/12/2014 18:22
MSA-SW43D-080514	240-40408-28	UXR5131.D	08/12/2014 18:44
MSA-SW44A-080514	240-40408-29	UXR5132.D	08/12/2014 19:07
MSA-SW44B-080514	240-40408-30	UXR5133.D	08/12/2014 19:30
MSA-SW44C-080514	240-40408-31	UXR5134.D	08/12/2014 19:52
MSA-SW44D-080514	240-40408-32	UXR5135.D	08/12/2014 20:15
MSA-SW45A-080514	240-40408-33	UXR5136.D	08/12/2014 20:38
MSA-SW45B-080514	240-40408-34	UXR5137.D	08/12/2014 21:00
MSA-SW45C-080514	240-40408-35	UXR5138.D	08/12/2014 21:23
MSA-SW45D-080514	240-40408-36	UXR5139.D	08/12/2014 21:46
EL-SW01A-080514	240-40408-37	UXR5140.D	08/12/2014 22:08
	240-40448-B-8 MS	UXR5141.D	08/12/2014 22:31
	240-40448-E-8 MSD	UXR5142.D	08/12/2014 22:54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142484/6

Matrix: Water | Lab File ID: UXR5120.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 14:25

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-142484/6

Matrix: Water Lab File ID: UXR5120.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2014 14:25

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142484 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142484/6

Matrix: Water | Lab File ID: UXR5120.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2014 14:25

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142484 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		63-129
460-00-4	4-Bromofluorobenzene (Surr)	75		66-120
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	81		74-120

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: BFB237.D BFB Injection Date: 08/14/2014

Instrument ID: A3UX17 BFB Injection Time: 10:19

Analysis Batch No.: 142823

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.3	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.8	(0.9)1
174	50.0 - 120.00 % of mass 95	93.4	
175	5.0 - 9.0 % of mass 174	6.3	(6.7)1
176	95.0 - 101.0 % of mass 174	90.8	(97.2)1
177	5.0 - 9.0 % of mass 176	5.7	(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 240-142823/2	UXR5162.D	08/14/2014	10:54
	CCV 240-142823/3	UXR5163.D	08/14/2014	11:16
	LCS 240-142823/4	UXR5164.D	08/14/2014	11:39
	MB 240-142823/6	UXR5166.D	08/14/2014	12:24
EL-SW01B-080514	240-40408-38	UXR5167.D	08/14/2014	13:06
EL-SW01C-080514	240-40408-39	UXR5168.D	08/14/2014	13:29
EL-SW01D-080514	240-40408-40	UXR5169.D	08/14/2014	13:52
TB-080514	240-40408-41	UXR5170.D	08/14/2014	14:14
MSA-SW41B-080514	240-40408-18	UXR5174.D	08/14/2014	15:45

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142823/2 Calibration Date: 08/14/2014 10:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5162.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	0.3712	0.3256		1.00	0.0100	-12.3	50.0
Chloromethane	Ave	0.5145	0.4490	0.1000	1.00	0.0100	-12.7	50.0
Vinyl chloride	Ave	0.4126	0.3668		1.00	0.0100	-11.1	20.0
Butadiene	Ave	0.3007	0.3956		0.0132	0.0100	31.6	50.0
Bromomethane	Ave	0.0989	0.1394		1.00	0.0100	40.9	50.0
Chloroethane	Lin1		0.1842		1.00	0.0100	24.6	50.0
Dichlorofluoromethane	Ave	0.3405	0.3338		2.00	0.0100	-2.0	50.0
Trichlorofluoromethane	Ave	0.3133	0.2880		1.00	0.0100	-8.1	50.0
Ethyl ether	Ave	0.3059	0.2451		2.00	0.0100	-19.9	50.0
Acrolein	Ave	0.0286	0.0296		20.0	0.0500	3.6	50.0
1,1-Dichloroethene	Ave	0.2775	0.2444		1.00	0.0100	-11.9	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2155	0.2085		1.00	0.0100	-3.3	50.0
Acetone	Lin1		0.0610		10.0	0.0200	-56.8*	50.0
Iodomethane	Ave	0.3277	0.3827		1.00	0.0100	16.8	50.0
Carbon disulfide	Ave	0.6513	0.6909		1.00	0.0100	6.1	50.0
3-Chloro-1-propene	Ave	0.1343	0.1347		2.00	0.0100	0.3	50.0
Methyl acetate	Ave	0.2504	0.1642		10.0	0.0500	-34.4	50.0
Methylene Chloride	Lin1		0.2815		1.00	0.0100	-3.0	50.0
tert-Butyl alcohol	Ave	0.0175	0.0107		50.0	0.100	-38.9	50.0
Acrylonitrile	Ave	0.1304	0.0900		20.0	0.100	-31.0	50.0
Methyl tert-butyl ether	Ave	0.6446	0.5054		1.00	0.0100	-21.6	50.0
trans-1,2-Dichloroethene	Ave	0.2861	0.2734		1.00	0.0100	-4.5	50.0
Hexane	Ave	0.0746	0.0650		1.00	0.0100	-13.0	20.0
1,1-Dichloroethane	Ave	0.5595	0.5067	0.1000	1.00	0.0100	-9.4	50.0
Vinyl acetate	Lin1		0.2996		2.00	0.00960	-32.1	50.0
2,2-Dichloropropane	Ave	0.1628	0.2109		1.00	0.0100	29.6	50.0
2-Butanone	Ave	0.1519	0.0828		10.0	0.0200	-45.5	50.0
cis-1,2-Dichloroethene	Ave	0.2910	0.2777		1.00	0.0100	-4.6	50.0
Bromochloromethane	Ave	0.1455	0.1417		1.00	0.0100	-2.6	50.0
Tetrahydrofuran	Lin1		0.0563		5.00	0.0200	-37.9	50.0
Chloroform	Ave	0.4604	0.4332		1.00	0.0100	-5.9	20.0
1,1,1-Trichloroethane	Ave	0.2864	0.3134		1.00	0.0100	9.4	50.0
Cyclohexane	Ave	0.5708	0.5261		1.00	0.0100	-7.8	50.0
1,1-Dichloropropene	Ave	0.3527	0.3255		1.00	0.0100	-7.7	50.0
Carbon tetrachloride	Ave	0.2832	0.2966		1.00	0.0100	4.7	50.0
Isobutyl alcohol	Ave	0.0125	0.0074		50.0	0.250	-40.4	50.0
Benzene	Ave	1.180	1.060		1.00	0.0100	-10.2	50.0
1,2-Dichloroethane	Ave	0.4303	0.3389		1.00	0.0100	-21.2	50.0
n-Heptane	Ave	0.0659	0.0556		1.00	0.0100	-15.7	50.0
Trichloroethene	Ave	0.3049	0.2880		1.00	0.0100	-5.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142823/2 Calibration Date: 08/14/2014 10:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5162.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	0.4268	0.3844		1.00	0.0100	-9.9	50.0
1,2-Dichloropropane	Ave	0.3133	0.2739		1.00	0.0100	-12.6	20.0
1,4-Dioxane	Ave	0.0024	0.0014		50.0	0.200	-39.1	50.0
Dibromomethane	Ave	0.1509	0.1238		1.00	0.0100	-18.0	50.0
Bromodichloromethane	Ave	0.3004	0.2803		1.00	0.0100	-6.7	50.0
2-Chloroethyl vinyl ether	Lin1		0.1104		10.0	0.0200	-40.2	50.0
cis-1,3-Dichloropropene	Lin1		0.2858		1.00	0.0100	-21.1	50.0
4-Methyl-2-pentanone	Ave	0.2625	0.1762		10.0	0.0200	-32.9	50.0
Toluene	Ave	1.639	1.518		1.00	0.0100	-7.4	20.0
trans-1,3-Dichloropropene	Lin1		0.2984		1.00	0.0100	-25.2	50.0
Ethyl methacrylate	Lin1		0.2742		1.00	0.0100	-28.7	50.0
1,1,2-Trichloroethane	Ave	0.3247	0.2627		1.00	0.0100	-19.1	50.0
Tetrachloroethene	Ave	0.3244	0.3157		1.00	0.0100	-2.7	50.0
1,3-Dichloropropane	Ave	0.5823	0.4489		1.00	0.0100	-22.9	50.0
2-Hexanone	Ave	0.2541	0.1551		10.0	0.0200	-39.0	50.0
Dibromochloromethane	Lin1		0.2599		1.00	0.0100	-15.7	50.0
1,2-Dibromoethane	Ave	0.2978	0.2320		1.00	0.0100	-22.1	50.0
Chlorobenzene	Ave	1.092	0.997	0.3000	1.00	0.0100	-8.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3226	0.3213		1.00	0.0100	-0.4	50.0
Ethylbenzene	Ave	0.5563	0.5284		1.00	0.0100	-5.0	20.0
m-Xylene & p-Xylene	Ave	0.6782	0.6524		2.00	0.0100	-3.8	50.0
o-Xylene	Lin1		0.6377		1.00	0.0100	-9.4	50.0
Styrene	Lin1		1.008		1.00	0.0100	-11.3	50.0
Bromoform	Ave	0.1524	0.1481	0.1000	1.00	0.0100	-2.9	50.0
Isopropylbenzene	Lin1		1.627		1.00	0.0100	-12.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7037	0.4945	0.3000	1.00	0.0100	-29.7	50.0
Bromobenzene	Ave	0.7810	0.7074		1.00	0.0100	-9.4	50.0
1,2,3-Trichloropropane	Ave	0.2358	0.1632		1.00	0.0100	-30.8	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1153		1.00	0.0100	-47.6	50.0
n-Propylbenzene	Lin1		0.7830		1.00	0.0100	-14.4	50.0
2-Chlorotoluene	Ave	0.7291	0.6792		1.00	0.0100	-6.8	50.0
1,3,5-Trimethylbenzene	Lin1		2.285		1.00	0.0100	-16.0	50.0
4-Chlorotoluene	Ave	0.7869	0.7212		1.00	0.0100	-8.3	50.0
tert-Butylbenzene	Lin1		1.977		1.00	0.0100	-16.7	50.0
1,2,4-Trimethylbenzene	Lin1		2.405		1.00	0.0100	-15.5	50.0
sec-Butylbenzene	Lin1		2.699		1.00	0.0100	-18.1	50.0
1,3-Dichlorobenzene	Ave	1.546	1.402		1.00	0.0100	-9.3	50.0
p-Isopropyltoluene	Lin1		2.461		1.00	0.0100	-15.3	50.0
1,4-Dichlorobenzene	Ave	1.603	1.422		1.00	0.0100	-11.3	50.0
n-Butylbenzene	Lin1		1.841		1.00	0.0100	-21.0	50.0
1,2-Dichlorobenzene	Ave	1.484	1.323		1.00	0.0100	-10.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCVIS 240-142823/2 Calibration Date: 08/14/2014 10:54

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 15:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 17:17

Lab File ID: UXR5162.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	0.0913	0.0660		2.00	0.0100	-27.7	50.0
1,2,4-Trichlorobenzene	Ave	0.8375	0.7285		1.00	0.0100	-13.0	50.0
Hexachlorobutadiene	Ave	0.3966	0.3543		1.00	0.0100	-10.6	50.0
Naphthalene	Lin1		1.092		1.00	0.0100	-42.7	50.0
1,2,3-Trichlorobenzene	Ave	0.8002	0.6416		1.00	0.0100	-19.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2464	0.2160		0.00782	0.00891	-12.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3388	0.2510		0.00660	0.00891	-25.9	50.0
Toluene-d8 (Surr)	Ave	1.387	1.225		0.00787	0.00891	-11.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4918	0.4362		0.00791	0.00891	-11.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCV 240-142823/3 Calibration Date: 08/14/2014 11:16

Instrument ID: A3UX17 Calib Start Date: 03/21/2014 01:03

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/21/2014 02:54

Lab File ID: UXR5163.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-Chlorohexane	Lin1		0.3380			0.0100		50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: CCV 240-142823/3 Calibration Date: 08/14/2014 11:16

Instrument ID: A3UX17 Calib Start Date: 07/25/2014 17:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2014 19:32

Lab File ID: UXR5163.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	0.0445	0.0304		20.0	0.100	-31.7	50.0
Diisopropyl ether	Ave	0.2204	0.2170		10.0	0.0100	-1.5	50.0
2-Chloro-1,3-butadiene	Ave	0.5128	0.5005		2.00	0.0100	-2.4	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7814	0.7008		5.00	0.0100	-10.3	50.0
Ethyl acetate	Ave	0.2623	0.0651		4.00	0.0200	-75.2*	50.0
Propionitrile	Ave	0.0500	0.0332		4.00	0.100	-33.5	50.0
Methacrylonitrile	Ave	0.2179	0.1436		2.00	0.100	-34.1	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5076	0.4745		5.00	0.0100	-6.5	50.0
n-Butanol	Lin1		0.0046		50.0	0.250	-47.0	50.0
Ethyl acrylate	Lin1		0.2390		1.00	0.0100	-37.1	50.0
Methyl methacrylate	Lin1		0.1732		2.00	0.0200	-40.0	50.0
2-Nitropropane	Ave	0.0513	0.0284		2.00	0.0200	-44.5	50.0
Cyclohexanone	Lin1		0.0134		20.0	0.100	-33.7	50.0
Pentachloroethane	Ave	0.2001	0.2135		0.0213	0.0200	6.7	50.0
1,2,3-Trimethylbenzene	Lin1		2.559		0.00860	0.0100	-14.0	50.0
Benzyl chloride	Qua		0.1053		1.00	0.0100	-10.9	50.0
1,3,5-Trichlorobenzene	Ave	1.109	1.062		1.00	0.0100	-4.2	50.0
2-Methylnaphthalene	Qua		0.2995		5.00	0.0200	-63.7*	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab File ID: UXR5166.D Lab Sample ID: MB 240-142823/6

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

Instrument ID: A3UX17 Date Analyzed: 08/14/2014 12:24

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-142823/4	UXR5164.D	08/14/2014 11:39
EL-SW01B-080514	240-40408-38	UXR5167.D	08/14/2014 13:06
EL-SW01C-080514	240-40408-39	UXR5168.D	08/14/2014 13:29
EL-SW01D-080514	240-40408-40	UXR5169.D	08/14/2014 13:52
TB-080514	240-40408-41	UXR5170.D	08/14/2014 14:14
MSA-SW41B-080514	240-40408-18	UXR5174.D	08/14/2014 15:45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142823/6

Matrix: Water | Lab File ID: UXR5166.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 12:24

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142823/6

Matrix: Water | Lab File ID: UXR5166.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 12:24

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	0.339	J	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-40408-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-142823/6

Matrix: Water | Lab File ID: UXR5166.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2014 12:24

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 142823 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		63-129
460-00-4	4-Bromofluorobenzene (Surr)	72		66-120
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	76		74-120

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

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-080514	240-40408-1	89	85	83	79
MSA-SW37B-080514	240-40408-2	89	81	80	75
MSA-SW37C-080514	240-40408-3	93	86	82	79
MSA-SW37D-080514	240-40408-4	91	82	80	77
MSA-SW38A-080514	240-40408-5	88	77	78	76
MSA-SW38B-080514	240-40408-6	90	81	77	75
MSA-SW38C-080514	240-40408-7	96	86	82	80
MSA-SW38D-080514	240-40408-8	92	82	78	75
MSA-SW39A-080514	240-40408-9	93	81	79	76
MSA-SW39B-080514	240-40408-10	91	80	77	74
MSA-SW39C-080514	240-40408-11	90	81	77	74
MSA-SW39D-080514	240-40408-12	94	83	81	78
MSA-SW40A-080514	240-40408-13	90	81	80	75
MSA-SW40B-080514	240-40408-14	94	80	79	75
MSA-SW40C-080514	240-40408-15	90	80	75	72
MSA-SW40D-080514	240-40408-16	101	86	83	81
MSA-SW41A-080514	240-40408-17	93	79	76	73
MSA-SW41B-080514	240-40408-18	93	80	78	75
MSA-SW41C-080514	240-40408-19	97	91	88	81
MSA-SW41D-080514	240-40408-20	92	85	83	79
MSA-SW42A-080514	240-40408-21	91	84	80	75
MSA-SW42B-080514	240-40408-22	91	81	78	73
MSA-SW42C-080514	240-40408-23	91	81	79	73
MSA-SW42D-080514	240-40408-24	92	81	81	74
MSA-SW43A-080514	240-40408-25	94	84	81	75
MSA-SW43B-080514	240-40408-26	94	86	82	77
MSA-SW43C-080514	240-40408-27	92	82	78	74
MSA-SW43D-080514	240-40408-28	91	81	79	73
MSA-SW44A-080514	240-40408-29	90	80	78	72
MSA-SW44B-080514	240-40408-30	93	82	79	73
MSA-SW44C-080514	240-40408-31	91	80	77	72
MSA-SW44D-080514	240-40408-32	95	83	79	75
MSA-SW45A-080514	240-40408-33	94	81	79	75
MSA-SW45B-080514	240-40408-34	96	81	77	72
MSA-SW45C-080514	240-40408-35	94	79	75	72

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-120
BFB = 4-Bromofluorobenzene (Surr)	66-120

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

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-080514	240-40408-36	93	79	74	71
EL-SW01A-080514	240-40408-37	96	83	80	77
EL-SW01B-080514	240-40408-38	93	78	77	72
EL-SW01C-080514	240-40408-39	98	83	79	73
EL-SW01D-080514	240-40408-40	92	78	76	73
TB-080514	240-40408-41	92	80	79	75
	MB 240-142307/6	86	84	82	75
	MB 240-142484/6	92	84	81	75
	MB 240-142823/6	90	79	76	72
	LCS 240-142307/4	86	77	88	90
	LCS 240-142484/4	88	79	89	89
	LCS 240-142823/4	90	76	87	88
	240-40400-C-5 MS	93	75	90	92
	240-40448-B-8 MS	88	73	84	83
	240-40400-A-5 MSD	88	73	88	89
	240-40448-E-8 MSD	86	69	82	81

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-120
BFB = 4-Bromofluorobenzene (Surr)	66-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5091.D

Lab ID: LCS 240-142307/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.98	100	72-120	
1,1,1-Trichloroethane	10.0	10.1	101	74-120	
1,1,2,2-Tetrachloroethane	10.0	8.61	86	68-120	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.74	97	74-151	
1,1-Dichloroethane	10.0	9.63	96	80-120	
1,1-Dichloroethene	10.0	9.57	96	78-131	
1,1-Dichloropropene	10.0	10.6	106	80-120	
1,2,3-Trichlorobenzene	10.0	9.32	93	54-126	
1,2,3-Trichloropropane	10.0	9.01	90	73-129	
1,2,4-Trichlorobenzene	10.0	9.66	97	48-135	
1,2,4-Trimethylbenzene	10.0	8.75	88	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.85	98	42-136	
1,2-Dibromoethane	10.0	9.43	94	79-120	
1,2-Dichlorobenzene	10.0	9.50	95	80-120	
1,2-Dichloroethane	10.0	8.69	87	71-127	
1,2-Dichloropropane	10.0	9.80	98	80-120	
1,3-Dichlorobenzene	10.0	9.33	93	80-120	
1,3-Dichloropropane	10.0	8.90	89	79-120	
1,4-Dichlorobenzene	10.0	9.32	93	80-120	
2,2-Dichloropropane	10.0	10.6	106	50-129	
2-Butanone	20.0	16.4	82	60-126	
2-Chloroethyl vinyl ether	12.0	9.95 J	83	52-131	
2-Chlorotoluene	10.0	9.77	98	76-120	
2-Hexanone	20.0	17.5	87	55-133	
4-Chlorotoluene	10.0	9.58	96	77-120	
4-Methyl-2-pentanone	20.0	19.0	95	63-128	
Acetone	20.0	12.8	64	43-136	
Benzene	10.0	9.59	96	80-120	
Bromobenzene	10.0	9.70	97	76-120	
Bromochloromethane	10.0	10.0	100	77-120	
Bromodichloromethane	10.0	9.39	94	72-121	
Bromoform	10.0	10.8	108	40-131	
Bromomethane	10.0	8.08	81	11-185	
Carbon disulfide	10.0	10.8	108	62-142	
Carbon tetrachloride	10.0	10.7	107	66-128	
Chlorobenzene	10.0	9.38	94	80-120	
Chloroethane	10.0	7.57	76	25-153	
Chloroform	10.0	9.46	95	79-120	
Chloromethane	10.0	6.69	67	44-126	
cis-1,2-Dichloroethene	10.0	9.94	99	80-120	
cis-1,3-Dichloropropene	10.0	9.38	94	61-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5091.D

Lab ID: LCS 240-142307/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromochloromethane	10.0	9.33	93	64-120	
Dibromomethane	10.0	9.50	95	80-120	
Dichlorodifluoromethane	10.0	5.15	51	19-129	
Ethylbenzene	10.0	9.94	99	80-120	
Hexachlorobutadiene	10.0	9.15	91	36-134	
Isopropylbenzene	10.0	9.04	90	75-120	
Methyl tert-butyl ether	10.0	9.48	95	52-144	
Methylene Chloride	10.0	9.79	98	66-131	
m-Xylene & p-Xylene	10.0	10.2	102	80-120	
Naphthalene	10.0	8.27	83	32-141	
n-Butylbenzene	10.0	8.24	82	66-125	
n-Propylbenzene	10.0	9.20	92	74-121	
o-Xylene	10.0	9.38	94	80-120	
p-Isopropyltoluene	10.0	8.74	87	74-120	
sec-Butylbenzene	10.0	8.66	87	70-120	
Styrene	10.0	9.47	95	79-120	
tert-Butyl alcohol	100	88.4	88	70-130	
tert-Butylbenzene	10.0	8.88	89	71-120	
Tetrachloroethene	10.0	10.1	101	79-120	
Toluene	10.0	9.69	97	80-120	
trans-1,2-Dichloroethene	10.0	9.97	100	80-120	
trans-1,3-Dichloropropene	10.0	9.55	96	58-120	
Trichloroethene	10.0	10.3	103	76-120	
Trichlorofluoromethane	10.0	9.05	91	49-157	
Vinyl acetate	8.00	6.53	82	46-161	
Vinyl chloride	10.0	7.37	74	53-127	
Xylenes, Total	20.0	19.6	98	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5118.D

Lab ID: LCS 240-142484/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.95	99	72-120	
1,1,1-Trichloroethane	10.0	9.99	100	74-120	
1,1,2,2-Tetrachloroethane	10.0	8.56	86	68-120	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.3	103	74-151	
1,1-Dichloroethane	10.0	9.79	98	80-120	
1,1-Dichloroethene	10.0	9.55	95	78-131	
1,1-Dichloropropene	10.0	10.8	108	80-120	
1,2,3-Trichlorobenzene	10.0	9.60	96	54-126	
1,2,3-Trichloropropane	10.0	8.94	89	73-129	
1,2,4-Trichlorobenzene	10.0	9.76	98	48-135	
1,2,4-Trimethylbenzene	10.0	8.66	87	76-120	
1,2-Dibromo-3-Chloropropane	10.0	10.4	104	42-136	
1,2-Dibromoethane	10.0	9.56	96	79-120	
1,2-Dichlorobenzene	10.0	9.28	93	80-120	
1,2-Dichloroethane	10.0	8.86	89	71-127	
1,2-Dichloropropane	10.0	9.84	98	80-120	
1,3-Dichlorobenzene	10.0	9.45	94	80-120	
1,3-Dichloropropane	10.0	8.96	90	79-120	
1,4-Dichlorobenzene	10.0	9.36	94	80-120	
2,2-Dichloropropane	10.0	10.7	107	50-129	
2-Butanone	20.0	16.2	81	60-126	
2-Chloroethyl vinyl ether	12.0	9.87 J	82	52-131	
2-Chlorotoluene	10.0	9.72	97	76-120	
2-Hexanone	20.0	17.8	89	55-133	
4-Chlorotoluene	10.0	9.56	96	77-120	
4-Methyl-2-pentanone	20.0	19.4	97	63-128	
Acetone	20.0	12.3	62	43-136	
Benzene	10.0	9.73	97	80-120	
Bromobenzene	10.0	9.69	97	76-120	
Bromochloromethane	10.0	10.2	102	77-120	
Bromodichloromethane	10.0	9.39	94	72-121	
Bromoform	10.0	10.5	105	40-131	
Bromomethane	10.0	9.01	90	11-185	
Carbon disulfide	10.0	10.6	106	62-142	
Carbon tetrachloride	10.0	10.6	106	66-128	
Chlorobenzene	10.0	9.59	96	80-120	
Chloroethane	10.0	7.84	78	25-153	
Chloroform	10.0	9.72	97	79-120	
Chloromethane	10.0	7.02	70	44-126	
cis-1,2-Dichloroethene	10.0	10.4	104	80-120	
cis-1,3-Dichloropropene	10.0	9.24	92	61-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5118.D

Lab ID: LCS 240-142484/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromochloromethane	10.0	9.05	91	64-120	
Dibromomethane	10.0	9.46	95	80-120	
Dichlorodifluoromethane	10.0	5.18	52	19-129	
Ethylbenzene	10.0	9.92	99	80-120	
Hexachlorobutadiene	10.0	8.73	87	36-134	
Isopropylbenzene	10.0	9.12	91	75-120	
Methyl tert-butyl ether	10.0	9.44	94	52-144	
Methylene Chloride	10.0	10.4	104	66-131	
m-Xylene & p-Xylene	10.0	10.3	103	80-120	
Naphthalene	10.0	8.43	84	32-141	
n-Butylbenzene	10.0	8.31	83	66-125	
n-Propylbenzene	10.0	9.12	91	74-121	
o-Xylene	10.0	9.35	93	80-120	
p-Isopropyltoluene	10.0	8.71	87	74-120	
sec-Butylbenzene	10.0	8.48	85	70-120	
Styrene	10.0	9.46	95	79-120	
tert-Butyl alcohol	100	91.0	91	70-130	
tert-Butylbenzene	10.0	8.77	88	71-120	
Tetrachloroethene	10.0	10.4	104	79-120	
Toluene	10.0	9.64	96	80-120	
trans-1,2-Dichloroethene	10.0	10.3	103	80-120	
trans-1,3-Dichloropropene	10.0	9.08	91	58-120	
Trichloroethene	10.0	10.3	103	76-120	
Trichlorofluoromethane	10.0	8.54	85	49-157	
Vinyl acetate	8.00	6.42	80	46-161	
Vinyl chloride	10.0	7.55	76	53-127	
Xylenes, Total	20.0	19.7	98	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5164.D

Lab ID: LCS 240-142823/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.4	104	72-120	
1,1,1-Trichloroethane	10.0	12.0	120	74-120	
1,1,2,2-Tetrachloroethane	10.0	7.70	77	68-120	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.3	113	74-151	
1,1-Dichloroethane	10.0	10.4	104	80-120	
1,1-Dichloroethene	10.0	9.79	98	78-131	
1,1-Dichloropropene	10.0	11.0	110	80-120	
1,2,3-Trichlorobenzene	10.0	9.36	94	54-126	
1,2,3-Trichloropropane	10.0	7.63	76	73-129	
1,2,4-Trichlorobenzene	10.0	10.0	100	48-135	
1,2,4-Trimethylbenzene	10.0	9.11	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.42	84	42-136	
1,2-Dibromoethane	10.0	8.62	86	79-120	
1,2-Dichlorobenzene	10.0	9.88	99	80-120	
1,2-Dichloroethane	10.0	8.47	85	71-127	
1,2-Dichloropropane	10.0	9.67	97	80-120	
1,3-Dichlorobenzene	10.0	9.78	98	80-120	
1,3-Dichloropropane	10.0	8.26	83	79-120	
1,4-Dichlorobenzene	10.0	9.74	97	80-120	
2,2-Dichloropropane	10.0	13.9	139	50-129	*
2-Butanone	20.0	13.0	65	60-126	
2-Chloroethyl vinyl ether	12.0	7.81 J	65	52-131	
2-Chlorotoluene	10.0	10.4	104	76-120	
2-Hexanone	20.0	13.5	68	55-133	
4-Chlorotoluene	10.0	10.1	101	77-120	
4-Methyl-2-pentanone	20.0	14.9	75	63-128	
Acetone	20.0	9.32	47	43-136	
Benzene	10.0	10.0	100	80-120	
Bromobenzene	10.0	9.88	99	76-120	
Bromochloromethane	10.0	10.3	103	77-120	
Bromodichloromethane	10.0	9.72	97	72-121	
Bromoform	10.0	9.47	95	40-131	
Bromomethane	10.0	14.5	145	11-185	
Carbon disulfide	10.0	12.0	120	62-142	
Carbon tetrachloride	10.0	11.8	118	66-128	
Chlorobenzene	10.0	9.87	99	80-120	
Chloroethane	10.0	12.0	120	25-153	
Chloroform	10.0	10.1	101	79-120	
Chloromethane	10.0	8.96	90	44-126	
cis-1,2-Dichloroethene	10.0	10.9	109	80-120	
cis-1,3-Dichloropropene	10.0	9.01	90	61-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5164.D

Lab ID: LCS 240-142823/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dibromochloromethane	10.0	8.67	87	64-120	
Dibromomethane	10.0	8.89	89	80-120	
Dichlorodifluoromethane	10.0	9.34	93	19-129	
Ethylbenzene	10.0	10.4	104	80-120	
Hexachlorobutadiene	10.0	10.2	102	36-134	
Isopropylbenzene	10.0	9.48	95	75-120	
Methyl tert-butyl ether	10.0	8.80	88	52-144	
Methylene Chloride	10.0	10.8	108	66-131	
m-Xylene & p-Xylene	10.0	10.6	106	80-120	
Naphthalene	10.0	6.94	69	32-141	
n-Butylbenzene	10.0	8.89	89	66-125	
n-Propylbenzene	10.0	9.53	95	74-121	
o-Xylene	10.0	9.67	97	80-120	
p-Isopropyltoluene	10.0	9.44	94	74-120	
sec-Butylbenzene	10.0	9.16	92	70-120	
Styrene	10.0	9.63	96	79-120	
tert-Butyl alcohol	100	69.6	70	70-130	
tert-Butylbenzene	10.0	9.25	92	71-120	
Tetrachloroethene	10.0	10.6	106	79-120	
Toluene	10.0	9.92	99	80-120	
trans-1,2-Dichloroethene	10.0	10.6	106	80-120	
trans-1,3-Dichloropropene	10.0	8.99	90	58-120	
Trichloroethene	10.0	10.7	107	76-120	
Trichlorofluoromethane	10.0	9.33	93	49-157	
Vinyl acetate	8.00	5.73	72	46-161	
Vinyl chloride	10.0	9.21	92	53-127	
Xylenes, Total	20.0	20.3	101	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5114.D

Lab ID: 240-40400-C-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	20.0	5.0 U	8.58	43	33-145	
Toluene	10.0	1.0 U	10.4	104	78-120	
Trichloroethene	10.0	1.0 U	10.8	108	66-120	
Vinyl chloride	10.0	0.50 U	8.30	83	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5115.D

Lab ID: 240-40400-A-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acetone	20.0	7.76	39	10	30	33-145	
Toluene	10.0	9.78	98	6	30	78-120	
Trichloroethene	10.0	10.5	105	3	30	66-120	
Vinyl chloride	10.0	7.53	75	10	30	49-130	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5141.D

Lab ID: 240-40448-B-8 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	1.0 U	11.7	117	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	6.74	67	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	10.4	104	70-152	
1,1-Dichloroethane	10.0	1.0 U	10.0	100	79-120	
1,1-Dichloroethene	10.0	1.0 U	9.49	95	74-135	
1,2,4-Trichlorobenzene	10.0	1.0 U	8.07	81	38-138	
1,2-Dibromo-3-Chloropropane	10.0	5.0 U	7.25	73	32-139	
1,2-Dibromoethane	10.0	1.0 U	7.77	78	74-120	
1,2-Dichlorobenzene	10.0	1.0 U	8.76	88	75-120	
1,2-Dichloroethane	10.0	1.0 U	8.13	81	68-129	
1,2-Dichloropropane	10.0	1.0 U	9.09	91	78-120	
1,3-Dichlorobenzene	10.0	1.0 U	8.67	87	73-120	
1,4-Dichlorobenzene	10.0	1.0 U	8.51	85	75-120	
2-Butanone	20.0	5.0 U	10.9	55	54-129	
2-Hexanone	20.0	5.0 U	11.7	59	47-139	
4-Methyl-2-pentanone	20.0	5.0 U	12.7	64	56-131	
Acetone	20.0	5.0 U	7.91	40	33-145	
Benzene	10.0	1.0 U	9.50	95	72-121	
Bromodichloromethane	10.0	1.0 U	8.87	89	67-120	
Bromoform	10.0	1.0 U	8.29	83	32-128	
Bromomethane	10.0	1.0 U	13.4	134	10-186	
Carbon disulfide	10.0	1.0 U	11.3	113	57-147	
Carbon tetrachloride	10.0	1.0 U	11.3	113	59-129	
Chlorobenzene	10.0	1.0 U	8.91	89	80-120	
Chloroethane	10.0	1.0 U	11.3	113	21-165	
Chloroform	10.0	1.0 U	9.81	98	76-120	
Chloromethane	10.0	1.0 U	6.69	67	33-132	
cis-1,2-Dichloroethene	10.0	1.0 U	10.6	106	70-120	
cis-1,3-Dichloropropene	10.0	1.0 U	7.51	75	51-120	
Dibromochloromethane	10.0	1.0 U	7.95	79	56-120	
Dichlorodifluoromethane	10.0	1.0 U	4.77	48	17-128	
Ethylbenzene	10.0	1.0 U	9.43	94	75-120	
Isopropylbenzene	10.0	1.0 U	8.63	86	68-120	
Methyl tert-butyl ether	10.0	1.0 U	8.13	81	46-144	
Methylene Chloride	10.0	1.0 U	9.99	100	63-128	
m-Xylene & p-Xylene	10.0	2.0 U	9.61	96	75-120	
o-Xylene	10.0	1.0 U	8.99	90	76-120	
Styrene	10.0	1.0 U	8.78	88	71-120	
Tetrachloroethene	10.0	1.0 U	9.49	95	70-120	
Toluene	10.0	1.0 U	9.28	93	78-120	
trans-1,2-Dichloroethene	10.0	1.0 U	10.7	107	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5141.D

Lab ID: 240-40448-B-8 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	1.0 U	7.48	75	46-120	
Trichloroethene	10.0	1.0 U	9.90	99	66-120	
Trichlorofluoromethane	10.0	1.0 U	6.66	67	46-157	
Vinyl chloride	10.0	0.50 U	7.30	73	49-130	
Xylenes, Total	20.0	2.0 U	18.6	93	76-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5142.D

Lab ID: 240-40448-E-8 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.7	117	1	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	6.35	64	6	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.92	99	4	30	70-152	
1,1-Dichloroethane	10.0	9.75	97	3	30	79-120	
1,1-Dichloroethene	10.0	9.54	95	1	30	74-135	
1,2,4-Trichlorobenzene	10.0	7.84	78	3	30	38-138	
1,2-Dibromo-3-Chloropropane	10.0	6.95	70	4	30	32-139	
1,2-Dibromoethane	10.0	7.55	76	3	30	74-120	
1,2-Dichlorobenzene	10.0	8.66	87	1	30	75-120	
1,2-Dichloroethane	10.0	8.08	81	1	30	68-129	
1,2-Dichloropropane	10.0	9.04	90	1	30	78-120	
1,3-Dichlorobenzene	10.0	8.62	86	1	30	73-120	
1,4-Dichlorobenzene	10.0	8.41	84	1	30	75-120	
2-Butanone	20.0	11.1	56	2	30	54-129	
2-Hexanone	20.0	11.5	58	2	30	47-139	
4-Methyl-2-pentanone	20.0	12.8	64	0	30	56-131	
Acetone	20.0	7.29	36	8	30	33-145	
Benzene	10.0	9.42	94	1	30	72-121	
Bromodichloromethane	10.0	8.94	89	1	30	67-120	
Bromoform	10.0	7.87	79	5	30	32-128	
Bromomethane	10.0	13.5	135	1	30	10-186	
Carbon disulfide	10.0	11.3	113	0	30	57-147	
Carbon tetrachloride	10.0	11.5	115	2	30	59-129	
Chlorobenzene	10.0	8.94	89	0	30	80-120	
Chloroethane	10.0	11.5	115	2	30	21-165	
Chloroform	10.0	9.83	98	0	30	76-120	
Chloromethane	10.0	6.89	69	3	30	33-132	
cis-1,2-Dichloroethene	10.0	10.4	104	2	30	70-120	
cis-1,3-Dichloropropene	10.0	7.68	77	2	30	51-120	
Dibromochloromethane	10.0	7.86	79	1	30	56-120	
Dichlorodifluoromethane	10.0	4.74	47	1	30	17-128	
Ethylbenzene	10.0	9.17	92	3	30	75-120	
Isopropylbenzene	10.0	8.47	85	2	30	68-120	
Methyl tert-butyl ether	10.0	8.04	80	1	30	46-144	
Methylene Chloride	10.0	9.93	99	1	30	63-128	
m-Xylene & p-Xylene	10.0	9.48	95	1	30	75-120	
o-Xylene	10.0	8.93	89	1	30	76-120	
Styrene	10.0	8.73	87	1	30	71-120	
Tetrachloroethene	10.0	9.25	92	3	30	70-120	
Toluene	10.0	9.06	91	2	30	78-120	
trans-1,2-Dichloroethene	10.0	10.4	104	3	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR5142.D

Lab ID: 240-40448-E-8 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
trans-1,3-Dichloropropene	10.0	7.42	74	1	30	46-120	
Trichloroethene	10.0	9.85	98	1	30	66-120	
Trichlorofluoromethane	10.0	6.83	68	3	30	46-157	
Vinyl chloride	10.0	7.69	77	5	30	49-130	
Xylenes, Total	20.0	18.4	92	1	30	76-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Sample No.: STD8260 240-140162/4 Date Analyzed: 07/25/2014 16:09

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR4842.D Heated Purge: (Y/N) N

Calibration ID: 23461

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1741153	5.76	1271319	8.48	718893	10.72
UPPER LIMIT		3482306	6.26	2542638	8.98	1437786	11.22
LOWER LIMIT		870577	5.26	635660	7.98	359447	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-140162/14		1779774	5.76	1317452	8.48	745752	10.72
ICV 240-140162/15		1800142	5.76	1299183	8.48	636763	10.72
CCVIS 240-142307/2		1497426	5.76	1107796	8.48	663535	10.72
CCVIS 240-142484/2		1628022	5.76	1202813	8.48	734940	10.72
CCVIS 240-142823/2		1484996	5.76	1087537	8.47	662881	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 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 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Sample No.: CCVIS 240-142307/2 Date Analyzed: 08/11/2014 12:30

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR5089.D Heated Purge: (Y/N) N

Calibration ID: 23463

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1497426	5.76	1107796	8.48	663535	10.72
UPPER LIMIT		2994852	6.26	2215592	8.98	1327070	11.22
LOWER LIMIT		748713	5.26	553898	7.98	331768	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-142307/3		1521679	5.76	1245785	8.48	630218	10.72
LCS 240-142307/4		1685754	5.76	1282575	8.48	746744	10.72
MB 240-142307/6		1493960	5.76	1190249	8.48	623402	10.72
240-40408-1	MSA-SW37A-080514	1472969	5.76	1147258	8.48	601234	10.72
240-40408-2	MSA-SW37B-080514	1446939	5.76	1116788	8.48	582470	10.72
240-40408-3	MSA-SW37C-080514	1418254	5.76	1116917	8.48	596671	10.72
240-40408-4	MSA-SW37D-080514	1394721	5.76	1088563	8.48	579912	10.72
240-40408-5	MSA-SW38A-080514	1444643	5.76	1090298	8.48	585518	10.72
240-40408-6	MSA-SW38B-080514	1395617	5.76	1075924	8.48	573778	10.72
240-40408-7	MSA-SW38C-080514	1383570	5.76	1053838	8.48	570021	10.72
240-40408-8	MSA-SW38D-080514	1369527	5.76	1043868	8.48	571604	10.72
240-40408-9	MSA-SW39A-080514	1380223	5.76	1056594	8.48	562489	10.72
240-40408-10	MSA-SW39B-080514	1397370	5.76	1081532	8.48	577732	10.72
240-40408-11	MSA-SW39C-080514	1400286	5.76	1079079	8.48	569943	10.72
240-40408-12	MSA-SW39D-080514	1399225	5.76	1070786	8.48	576459	10.72
240-40408-13	MSA-SW40A-080514	1377238	5.76	1051099	8.48	564326	10.72
240-40408-14	MSA-SW40B-080514	1324783	5.76	1027908	8.48	554598	10.72
240-40408-15	MSA-SW40C-080514	1343284	5.76	1062439	8.48	578980	10.72
240-40408-16	MSA-SW40D-080514	1342365	5.76	1050935	8.48	569284	10.72
240-40408-17	MSA-SW41A-080514	1330321	5.76	1045484	8.48	553053	10.72
240-40400-C-5 MS		1376759	5.76	999503	8.48	623697	10.72
240-40400-A-5 MSD		1515881	5.76	1131575	8.48	661431	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 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 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Sample No.: CCVIS 240-142484/2 Date Analyzed: 08/12/2014 12:54

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR5116.D Heated Purge: (Y/N) N

Calibration ID: 23463

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1628022	5.76	1202813	8.48	734940	10.72
UPPER LIMIT		3256044	6.26	2405626	8.98	1469880	11.22
LOWER LIMIT		814011	5.26	601407	7.98	367470	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-142484/3		1465644	5.76	1191522	8.48	608022	10.72
LCS 240-142484/4		1555917	5.76	1191477	8.48	713557	10.72
MB 240-142484/6		1444548	5.76	1167631	8.48	611671	10.72
240-40408-19	MSA-SW41C-080514	1346961	5.76	1061642	8.48	566420	10.72
240-40408-20	MSA-SW41D-080514	1409331	5.76	1100785	8.48	594183	10.72
240-40408-21	MSA-SW42A-080514	1377220	5.76	1069856	8.48	570141	10.72
240-40408-22	MSA-SW42B-080514	1361172	5.76	1051047	8.48	561940	10.72
240-40408-23	MSA-SW42C-080514	1342618	5.76	1045975	8.48	568295	10.72
240-40408-24	MSA-SW42D-080514	1382045	5.76	1085248	8.48	575800	10.72
240-40408-25	MSA-SW43A-080514	1338479	5.76	1042155	8.48	563032	10.72
240-40408-26	MSA-SW43B-080514	1333935	5.76	1062158	8.48	571896	10.72
240-40408-27	MSA-SW43C-080514	1331342	5.76	1039146	8.48	560106	10.72
240-40408-28	MSA-SW43D-080514	1346079	5.76	1052449	8.48	571058	10.72
240-40408-29	MSA-SW44A-080514	1319575	5.76	1029544	8.48	562825	10.72
240-40408-30	MSA-SW44B-080514	1292399	5.76	1001218	8.48	547903	10.72
240-40408-31	MSA-SW44C-080514	1315446	5.76	1017544	8.48	546072	10.72
240-40408-32	MSA-SW44D-080514	1319348	5.76	1054067	8.48	562405	10.72
240-40408-33	MSA-SW45A-080514	1269362	5.76	999943	8.48	542945	10.72
240-40408-34	MSA-SW45B-080514	1233354	5.76	980556	8.48	529539	10.72
240-40408-35	MSA-SW45C-080514	1246239	5.76	990733	8.48	532573	10.72
240-40408-36	MSA-SW45D-080514	1250692	5.76	992594	8.48	528074	10.72
240-40408-37	EL-SW01A-080514	1213678	5.76	942106	8.48	515608	10.72
240-40448-B-8 MS		1352256	5.76	1012758	8.48	621988	10.72
240-40448-E-8 MSD		1375488	5.76	1031674	8.48	627080	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 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 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Sample No.: CCVIS 240-142823/2 Date Analyzed: 08/14/2014 10:54

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR5162.D Heated Purge: (Y/N) N

Calibration ID: 23463

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1484996	5.76	1087537	8.47	662881	10.72
UPPER LIMIT		2969992	6.26	2175074	8.97	1325762	11.22
LOWER LIMIT		742498	5.26	543769	7.97	331441	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-142823/3		1397186	5.76	1111687	8.48	566834	10.72
LCS 240-142823/4		1436951	5.76	1081546	8.48	637338	10.72
MB 240-142823/6		1299182	5.76	1036627	8.48	570530	10.72
240-40408-38	EL-SW01B-080514	1283801	5.76	1004850	8.48	551729	10.72
240-40408-39	EL-SW01C-080514	1213326	5.76	964095	8.48	515105	10.72
240-40408-40	EL-SW01D-080514	1261107	5.76	999846	8.48	539444	10.72
240-40408-41	TB-080514	1320756	5.76	1025079	8.48	547230	10.72
240-40408-18	MSA-SW41B-080514	1313658	5.76	1017319	8.48	544183	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 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 8260B

SAMPLE ID MSA-SW38A-080514

SAMPLE CALC for trichloroethene

IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (ug/L)	Final Extract Volume (mL)	AVE RRF	CONCENTRATION (ug/L)
1444643	1	130373	10	5	0.3049	2.96

Sample Volume (mL)
5

Sample Calculation

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Client Sample ID: MSA-SW38A-080514 Lab Sample ID: 240-40408-5

Matrix: Water Lab File ID: UXR5100.D

Analysis Method: 8260B Date Collected: 08/05/2014 11:21

Sample wt/vol: 5(mL) Date Analyzed: 08/11/2014 16:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 142307 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	7.6		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-65-0	tert-Butyl alcohol	20	U	20	3.9
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	3.0		1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	3.0		0.50	0.22

Report Date: 12-Aug-2014 10:52:59 Chrom Revision: 2.2 24-Jun-2014 07:21:42

Sample calculation

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCCHROM\ChromData\A3UX17\20140811-33777.b\UXR5100.D
Lims ID: 240-40408-B-5 Lab Sample ID: 240-40408-5
Client ID: MSA-SW38A-080514
Sample Type: Client
Inject. Date: 11-Aug-2014 16:46:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0033777-013
Operator ID: 1644 Instrument ID: A3UX17

Method: \\NCCHROM\ChromData\A3UX17\20140811-33777.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Aug-2014 10:46:32 Calib Date: 25-Jul-2014 19:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCCHROM\ChromData\A3UX17\20140725-33242.b\UXR4851.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: williamsla Date: 12-Aug-2014 10:37:33

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.763	5.763	0.000	99	1444643	10.0	
*	2 Chlorobenzene-d5	117	8.479	8.479	0.000	86	1090298	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	94	585518	10.0	
$	4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	94	277876	7.81	
$	5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.491	0.000	0	337945	6.90	
$	6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	1057775	6.99	
$	7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	97	361306	6.74	
	9 Dichlorodifluoromethane	85		1.636				ND	
	10 Chloromethane	50		1.826				ND	
	11 Vinyl chloride	62	1.945	1.945	0.000	97	179325	3.01	
	12 Bromomethane	94		2.312				ND	
	13 Chloroethane	64		2.419				ND	
	15 Trichlorofluoromethane	101		2.680				ND	
	19 1,1-Dichloroethene	96		3.178				ND	
	20 1,1,2-Trichloro-1,2,2-trif	151		3.190				ND	
	21 Acetone	43		3.237				ND	
	23 Carbon disulfide	76		3.392				ND	
	27 Methylene Chloride	84		3.641				ND	
	28 2-Methyl-2-propanol	59		3.735				ND	
	30 Methyl tert-butyl ether	73		3.878				ND	
	31 trans-1,2-Dichloroethene	96		3.890				ND	
	33 1,1-Dichloroethane	63		4.269				ND	
	34 Vinyl acetate	43		4.305				ND	
	35 Isopropyl ether	87		4.305				ND	
	37 Tert-butyl ethyl ether	59		4.625				ND	
	38 2,2-Dichloropropane	77		4.779				ND	
	39 cis-1,2-Dichloroethene	96	4.779	4.779	0.000	82	320442	7.62	
	40 2-Butanone (MEK)	43		4.791				ND	
	44 Chlorobromomethane	128		4.992				ND	
	46 Chloroform	83		5.052				ND	
	47 1,1,1-Trichloroethane	97		5.206				ND	
	49 1,1-Dichloropropene	75		5.348				ND	

Sample Calculation

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
50 Carbon tetrachloride	117		5.348				ND	
52 Benzene	78		5.538				ND	
53 1,2-Dichloroethane	62		5.550				ND	
54 Tert-amyl methyl ether	73		5.609				ND	
57 Trichloroethene	130	6.083	6.083	0.000	94	130373	2.96	
60 1,2-Dichloropropane	63		6.285				ND	
62 Dibromomethane	93		6.392				ND	
64 Dichlorobromomethane	83		6.522				ND	
66 2-Chloroethyl vinyl ether	63		6.759				ND	
67 cis-1,3-Dichloropropene	75		6.902				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91		7.210				ND	
70 trans-1,3-Dichloropropene	75		7.400				ND	
73 Tetrachloroethene	164		7.696				ND	
75 1,3-Dichloropropane	76		7.732				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.945				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112		8.503				ND	
82 1,1,1,2-Tetrachloroethane	131		8.574				ND	
83 Ethylbenzene	106		8.586				ND	
84 m-Xylene & p-Xylene	106		8.692				ND	
85 o-Xylene	106		9.084				ND	
86 Styrene	104		9.095				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.428				ND	
91 1,1,2,2-Tetrachloroethane	83		9.724				ND	
92 Bromobenzene	156		9.748				ND	
94 1,2,3-Trichloropropane	110		9.771				ND	
95 N-Propylbenzene	120		9.819				ND	
96 2-Chlorotoluene	126		9.926				ND	
98 4-Chlorotoluene	126		10.032				ND	
99 tert-Butylbenzene	119		10.317				ND	
101 1,2,4-Trimethylbenzene	105		10.364				ND	
102 sec-Butylbenzene	105		10.530				ND	
103 1,3-Dichlorobenzene	146	10.661	10.661	0.000	1	2623	0.0290	7
104 4-Isopropyltoluene	119		10.673				ND	
105 1,4-Dichlorobenzene	146		10.744				ND	
106 1,2,3-Trimethylbenzene	105		10.791				ND	
108 n-Butylbenzene	91		11.076				ND	
109 1,2-Dichlorobenzene	146		11.123				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.906				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
114 Hexachlorobutadiene	225		12.890				ND	
115 Naphthalene	128		12.997				ND	
116 1,2,3-Trichlorobenzene	180		13.258				ND	
S 130 Xylenes, Total	106		16.530				0	

Sample Calculation

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

Lab Name: TestAmerica Canton Job No.: 240-40408-1 Analy Batch No.: 140162

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2014 15:24 Calibration End Date: 07/25/2014 17:17 Calibration ID: 23461

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	0.0132 0.0122	0.0112	0.0127	0.0130	0.0124	Ave		0.0125				5.8		15.0			
Benzene	1.1804 1.2225	1.1425	1.1390	1.2473	1.1503	Ave		1.1803				3.8		15.0			
1,2-Dichloroethane	0.4349 0.4342	0.4169	0.4279	0.4553	0.4123	Ave		0.4303				3.6		15.0			
n-Heptane	0.0600 0.0731	0.0567	0.0624	0.0759	0.0674	Ave		0.0659				11.0		15.0			
Trichloroethene	0.3176 0.3094	0.2941	0.2916	0.3228	0.2937	Ave		0.3049				4.4		15.0			
Methylcyclohexane	0.3925 0.4728	0.3712	0.4060	0.4721	0.4459	Ave		0.4268				10.0		15.0			
1,2-Dichloropropane	0.3025 0.3279	0.2949	0.2994	0.3423	0.3129	Ave		0.3133				5.9		15.0			
Dibromomethane	0.1577 0.1544	0.1407	0.1442	0.1599	0.1488	Ave		0.1509				5.1		15.0			
1,4-Dioxane	0.0019 0.0024	0.0025	0.0024	0.0024	0.0026	Ave		0.0024				10.0		15.0			
Bromodichloromethane	0.2768 0.3380	0.2715	0.2846	0.3230	0.3084	Ave		0.3004				9.0		15.0			
2-Chloroethyl vinyl ether	0.1228 0.1984	0.1393	0.1619	0.1953	0.1833	Lin1	-0.114	0.1941							0.9970		0.9900
cis-1,3-Dichloropropene	0.2295 0.3936	0.2722	0.3037	0.3560	0.3531	Lin1	-0.125	0.3780							0.9950		0.9900
4-Methyl-2-pentanone	0.2448 0.2897	0.2208	0.2466	0.2979	0.2753	Ave		0.2625				11.0		15.0			
Toluene	1.3627 1.7724	1.5399	1.6611	1.8062	1.6890	Ave		1.6386				10.0		15.0			
trans-1,3-Dichloropropene	0.2543 0.4378	0.2836	0.3275	0.3899	0.3920	Lin1	-0.149	0.4191							0.9940		0.9900
Ethyl methacrylate	0.2322 0.4119	0.2785	0.3255	0.3924	0.3890	Lin1	-0.137	0.4039							0.9970		0.9900
1,1,2-Trichloroethane	0.3195 0.3240	0.3205	0.3208	0.3514	0.3121	Ave		0.3247				4.2		15.0			
Tetrachloroethene	0.3107 0.3316	0.3183	0.3175	0.3432	0.3252	Ave		0.3244				3.6		15.0			
1,3-Dichloropropane	0.5419 0.5897	0.5671	0.5817	0.6367	0.5767	Ave		0.5823				5.4		15.0			
2-Hexanone	0.2066 0.2810	0.2114	0.2595	0.2880	0.2778	Ave		0.2541				14.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **OCTOBER 3, 2014**

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

SUBJECT: **INORGANIC DATA VALIDATION- DISSOLVED METALS AND HARDNESS PARAMETERS**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
SDG 240-40408-1

SAMPLES:

36/Aqueous/

MSA-SW37A-080514	MSA-SW37B-080514	MSA-SW37C-080514	MSA-SW37D-080514
MSA-SW38A-080514	MSA-SW38B-080514	MSA-SW38C-080514	MSA-SW38D-080514
MSA-SW39A-080514	MSA-SW39B-080514	MSA-SW39C-080514	MSA-SW39D-080514
MSA-SW40A-080514	MSA-SW40B-080514	MSA-SW40C-080514	MSA-SW40D-080514
MSA-SW41A-080514	MSA-SW41B-080514	MSA-SW41C-080514	MSA-SW41D-080514
MSA-SW42A-080514	MSA-SW42B-080514	MSA-SW42C-080514	MSA-SW42D-080514
MSA-SW43A-080514	MSA-SW43B-080514	MSA-SW43C-080514	MSA-SW43D-080514
MSA-SW44A-080514	MSA-SW44B-080514	MSA-SW44C-080514	MSA-SW44D-080514
MSA-SW45A-080514	MSA-SW45B-080514	MSA-SW45C-080514	MSA-SW45D-080514

Overview

The sample set for Lockheed MSA, SDG 240-40408-1, consists of thirty-six (36) aqueous environmental samples. This SDG contained no field duplicate pairs.

All samples were analyzed for dissolved metals and hardness parameters (calcium hardness, magnesium hardness, and hardness). The samples were collected by Tetra Tech on August 5, 2014 and analyzed by TestAmerica. Analyses were conducted using SW846 method 6020A for metals, SW846 method 7470A for mercury, and standard method 2340B for total hardness (as CaCO3 by calculation).

The data review was based on data completeness, holding times, ICP/MS tune, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, ICP internal standard recoveries, ICP serial dilution, laboratory control sample recoveries, matrix spike recoveries, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems None.

Minor Problems

- The CRQL standards for mercury had percent recoveries < 70% for mercury affecting samples analyzed on 8/12/2014. Nondetected results were qualified as estimated (UJ).

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

Analyte	Maximum Concentration (ug/L)	Action Level (ug/L)
Antimony[1]	0.228	1.14
Antimony[3]	0.69	3.45
Antimony[4]	0.555	2.775
Antimony[7]	0.131	0.655
Arsenic[2]	0.189	0.945
Arsenic[4]	0.109	0.545
Arsenic[8]	0.501	2.505
Barium[2]	0.876	4.38
Beryllium[1,6]	0.065	0.325
Beryllium[3,5]	0.096	0.48
Beryllium[9]	0.059	0.295
Cadmium[7]	0.04	0.2
Cadmium[9]	0.047	0.235
Chromium[4]	0.158	0.79
Cobalt[7]	0.02	0.1
Cobalt[9]	0.045	0.225
Copper[2]	1.46	7.3
Copper[4]	3.79	18.95
Lead[2]	0.21	1.05
Lead[4]	0.809	4.045
Nickel[2]	0.125	0.625
Selenium[1]	0.457	2.285
Selenium[3,5]	0.5	2.5
Silver[7]	0.01	0.05
Silver[9]	0.036	0.18
Thallium[9]	0.669	3.345
Tungsten[1]	0.279	1.395
Tungsten[3,5,6]	4.09	20.45
Tungsten[8]	0.576	2.88
Zinc[2]	6.78	33.9
Zinc[4]	5.14	25.7

[1] Maximum concentration found in a calibration blank affecting samples MSA-SW37A-080514, MSA-SW37B-080514, MSA-SW37C-080514, MSA-SW37D-080514, MSA-SW38A-080514, and MSA-SW38B-080514.
[2] Maximum concentration found in a method blank (MB 240-142080/1-A) affecting samples in preparation batch 142080.
[3] Maximum concentration found in a calibration blank affecting samples MSA-SW38C-080514, MSA-SW38D-080514, and MSA-SW39A-080514.
[4] Maximum concentration found in a method blank (MB 240-142276/1-A) affecting samples in preparation batch 142276.
[5] Maximum concentration found in a calibration blank affecting samples MSA-SW39B-080514, MSA-SW39C-080514, MSA-SW39D-080514, MSA-SW40A-080514, MSA-SW40B-080514, MSA-SW40C-080514, MSA-SW40D-080514, MSA-SW41A-080514, MSA-SW41B-080514, and MSA-SW41C-080514.
[6] Maximum concentration found in a calibration blank affecting samplesMSA-SW41D-080514, MSA-SW42A-080514, and MSA-SW42B-080514.
[7] Maximum concentration found in a calibration blank affecting samples MSA-SW44B-

080514, MSA-SW44C-080514, MSA-SW44D-080514, MSA-SW45A-080514, MSA-SW45B-080514, MSA-SW45C-080514, and MSA-SW45D-080514.

(8) Maximum concentration found in a method blank (MB 240-142287/1-A) affecting samples in preparation batch 142287.

(9) Maximum concentration found in a calibration blank affecting samples MSA-SW42C-080514, MSA-SW42D-080514, MSA-SW43A-080514, MSA-SW43B-080514, MSA-SW43C-080514, MSA-SW43D-080514, and MSA-SW44A-080514.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the action level were as non-detected, (U), due to blank contamination.

- Internal standard recoveries were < 60% for Lithium affecting samples MSA-SW44B-080514, MSA-SW44C-080514, MSA-SW44D-080514, MSA-SW45A-080514, MSA-SW45B-080514, MSA-SW45C-080514, and MSA-SW45D-080514 analyzed on 8/14/2014. Nondetected results for beryllium were qualified as estimated (UJ) in the affected samples.

- Internal standard recoveries were < 60% for Indium affecting samples MSA-SW44B-080514 and MSA-SW44C-080514 analyzed on 8/14/2014. Results for antimony, arsenic, barium, cadmium, selenium, and silver were qualified as estimated (J) and (UJ) for detected and nondetected results in the affected samples. Several samples were previously qualified for blank contamination.

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

Notes

Non-detected results were reported at the MDL.

Serial dilution percent difference was greater than 10% for tungsten in sample MSA-SW42C-080514. No validation actions were taken because all samples were previously qualified due to blank contamination.

Executive Summary

Laboratory Performance: CRQL standard non-compliance was noted for mercury. Several analytes were present in the laboratory blanks. Internal standard noncompliance was noted for several samples.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review" (January 2010). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Leanne M. Ganser
Environmental Scientist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

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

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

VQL – Validation Qualifier
QLCD – Validation Qualifier Code

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % 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 = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
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 (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% 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 sigma deviation is greater than sample activity

PROJ_NO: 06183	NSAMPLE	MSA-SW37A-080514			MSA-SW37B-080514			MSA-SW37C-080514			MSA-SW37D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-1			240-40408-2			240-40408-3			240-40408-4		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.42	U	A	0.32	U	A	0.29	U	A	0.3	U	A
ARSENIC		1.5	J	P	1.5	J	P	1.4	J	P	1.5	J	P
BARIUM		18			17			17			17		
BERYLLIUM		0.31	U	A	0.2	U	A	0.14	U	A	0.12	U	A
CADMIUM		0.31	J	P	0.23	J	P	0.2	J	P	0.2	J	P
CHROMIUM		0.34	J	P	0.26	J	P	0.34	J	P	0.25	J	P
COBALT		0.17	J	P	0.091	J	P	0.077	J	P	0.081	J	P
COPPER		6.8	U	A	7	U	A	7.1	U	A	7.3		
LEAD		0.44	U	A	0.28	U	A	0.24	U	A	0.24	U	A
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.6	J	P	1.5	J	P	1.5	J	P	1.7	J	P
NICKEL		1.5	J	P	1.9	J	P	1.7	J	P	1.8	J	P
SELENIUM		1.1	U	A	1.1	U	A	0.82	U	A	0.8	U	A
SILVER		0.017	J	P	0.0083	U		0.0083	U		0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.73	U	A	0.96	U	A	1.1	U	A	1.1	U	A
VANADIUM		0.49	J	P	0.39	J	P	0.3	J	P	0.36	J	P
ZINC		10	U	A	8.6	U	A	8.7	U	A	10	U	A

PROJ_NO: 06183	NSAMPLE	MSA-SW38A-080514			MSA-SW38B-080514			MSA-SW38C-080514			MSA-SW38D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-5			240-40408-6			240-40408-7			240-40408-8		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.29	U	A	0.29	U	A	0.69	U	A	0.61	U	A
ARSENIC		1.4	J	P	1.4	J	P	1.3	J	P	1.4	J	P
BARIUM		17			17			18			19		
BERYLLIUM		0.096	U	A	0.086	U	A	0.18	U	A	0.32	U	A
CADMIUM		0.46	J	P	0.19	J	P	0.3	J	P	0.33	J	P
CHROMIUM		0.51	J	P	0.23	J	P	0.37	U	A	0.36	U	A
COBALT		0.47	J	P	0.11	J	P	0.18	J	P	0.22	J	P
COPPER		6.1	U	A	6.8	U	A	10	U	A	11	U	A
LEAD		0.22	U	A	0.21	U	A	0.61	U	A	0.57	U	A
MERCURY		0.12	U		0.12	U		0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.5	J	P	1.5	J	P	1.6	J	P	1.6	J	P
NICKEL		2.2			1.9	J	P	2			2		
SELENIUM		0.86	U	A	0.73	U	A	0.8	U	A	0.99	U	A
SILVER		0.0083	U		0.0083	U		0.01	J	P	0.016	J	P
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.1	U	A	1.2	U	A	0.67	U	A	1.3	U	A
VANADIUM		0.36	J	P	0.31	J	P	0.66	J	P	0.76	J	P
ZINC		8.6	U	A	7.5	U	A	9.9	U	A	8.9	U	A

PROJ_NO: 06183	NSAMPLE	MSA-SW39A-080514			MSA-SW39B-080514			MSA-SW39C-080514			MSA-SW39D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-9			240-40408-10			240-40408-11			240-40408-12		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.47	U	A	0.48	U	A	0.44	U	A	0.38	U	A
ARSENIC		1.5	J	P	1.3	J	P	1.4	J	P	1.5	J	P
BARIUM		18			18			18			18		
BERYLLIUM		0.23	U	A	0.15	U	A	0.11	U	A	0.11	U	A
CADMIUM		0.1	J	P	0.15	J	P	0.17	J	P	0.14	J	P
CHROMIUM		0.28	U	A	0.31	U	A	0.28	U	A	0.3	U	A
COBALT		0.14	J	P	0.12	J	P	0.093	J	P	0.058	J	P
COPPER		9	U	A	10	U	A	10	U	A	11	U	A
LEAD		0.42	U	A	0.37	U	A	0.33	U	A	0.29	U	A
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.6	J	P	1.6	J	P	1.6	J	P	1.7	J	P
NICKEL		1.7	J	P	1.9	J	P	1.9	J	P	1.9	J	P
SELENIUM		0.86	U	A	0.91	U	A	0.98	U	A	0.82	U	A
SILVER		0.0083	U		0.0083	U		0.0083	U		0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.1	U	A	0.95	U	A	1.1	U	A	1.2	U	A
VANADIUM		0.36	J	P	0.61	J	P	0.15	U		0.15	U	
ZINC		4.2	U	A	6.8	U	A	8.1	U	A	7.1	U	A

PROJ_NO: 06183	NSAMPLE	MSA-SW40A-080514			MSA-SW40B-080514			MSA-SW40C-080514			MSA-SW40D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-13			240-40408-14			240-40408-15			240-40408-16		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.4	U	A	0.39	U	A	0.37	U	A	0.38	U	A
ARSENIC		1.5	J	P	1.5	J	P	1.5	J	P	1.5	J	P
BARIUM		18			17			18			18		
BERYLLIUM		0.073	U	A	0.074	U	A	0.06	U	A	0.069	U	A
CADMIUM		0.23	J	P	0.28	J	P	0.21	J	P	0.19	J	P
CHROMIUM		0.32	U	A	0.28	U	A	0.26	U	A	0.29	U	A
COBALT		0.23	J	P	0.23	J	P	0.097	J	P	0.11	J	P
COPPER		10	U	A	11	U	A	10	U	A	11	U	A
LEAD		0.25	U	A	0.25	U	A	0.23	U	A	0.23	U	A
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.6	J	P	1.5	J	P	1.6	J	P	1.6	J	P
NICKEL		2.1			1.9	J	P	1.8	J	P	2		
SELENIUM		0.86	U	A	0.63	U	A	0.84	U	A	0.68	U	A
SILVER		0.0083	U		0.0083	U		0.0083	U		0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.3	U	A	1.4	U	A	1.4	U	A	1.5	U	A
VANADIUM		0.19	J	P	0.2	J	P	0.15	U		0.16	J	P
ZINC		9.7	U	A	8	U	A	8	U	A	8.2	U	A

PROJ_NO: 06183	NSAMPLE	MSA-SW41A-080514			MSA-SW41B-080514			MSA-SW41C-080514			MSA-SW41D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-17			240-40408-18			240-40408-19			240-40408-20		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.37	U	A	0.33	U	A	0.44	U	A	0.35	U	A
ARSENIC		1.5	J	P	1.4	J	P	1.5	J	P	1.4	J	P
BARIUM		18			17			18			18		
BERYLLIUM		0.069	U	A	0.081	U	A	0.064	U	A	0.045	U	A
CADMIUM		0.23	J	P	0.19	J	P	0.26	J	P	0.17	J	P
CHROMIUM		0.28	U	A	0.26	U	A	0.35	U	A	0.29	U	A
COBALT		0.25	J	P	0.18	J	P	0.22	J	P	0.068	J	P
COPPER		9.4	U	A	9.3	U	A	9.6	U	A	28		
LEAD		0.24	U	A	0.21	U	A	0.32	U	A	0.22	U	A
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.5	J	P	1.6	J	P	1.7	J	P	1.6	J	P
NICKEL		1.9	J	P	1.8	J	P	2			2		
SELENIUM		0.79	U	A	0.68	U	A	0.73	U	A	0.55	J	P
SILVER		0.0083	U		0.0083	U		0.0083	U		0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.4	U	A	1.4	U	A	1.3	U	A	1.2	U	A
VANADIUM		0.28	J	P	0.28	J	P	0.28	J	P	0.32	J	P
ZINC		7.8	U	A	6.7	U	A	9.2	U	A	8.9	U	A

PROJ_NO: 06183	NSAMPLE	MSA-SW42A-080514			MSA-SW42B-080514			MSA-SW42C-080514			MSA-SW42D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-21			240-40408-22			240-40408-23			240-40408-24		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.35	U	A	0.34	U	A	0.25	J	P	0.32	J	P
ARSENIC		1.4	J	P	1.4	J	P	1.3	U	A	1.4	U	A
BARIUM		17			17			18			18		
BERYLLIUM		0.046	U	A	0.043	U	A	0.064	U	A	0.14	U	A
CADMIUM		0.2	J	P	0.19	J	P	0.25	J	P	0.37	J	P
CHROMIUM		0.27	U	A	0.26	U	A	0.38	J	P	0.38	J	P
COBALT		0.11	J	P	0.12	J	P	0.14	U	A	0.16	U	A
COPPER		9.5	U	A	9	U	A	7.1			6.6		
LEAD		0.22	U	A	0.2	U	A	0.38	J	P	0.31	J	P
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.5	J	P	1.7	J	P	1.6	J	P	1.7	J	P
NICKEL		1.9	J	P	1.7	J	P	2.1			2		
SELENIUM		0.61	J	P	0.6	J	P	0.4	J	P	0.66	J	P
SILVER		0.0083	U		0.0083	U		0.011	U	A	0.016	U	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.3	U	A	1.3	U	A	0.86	U	A	1.3	U	A
VANADIUM		0.19	J	P	0.15	U		0.82	J	P	0.68	J	P
ZINC		13	U	A	7.4	U	A	8.2	J	P	6.1	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW43A-080514			MSA-SW43B-080514			MSA-SW43C-080514			MSA-SW43D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-25			240-40408-26			240-40408-27			240-40408-28		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.24	J	P	0.2	J	P	0.2	J	P	0.19	J	P
ARSENIC		1.5	U	A	1.5	U	A	1.5	U	A	1.6	U	A
BARIUM		19			18			18			18		
BERYLLIUM		0.13	U	A	0.076	U	A	0.079	U	A	0.071	U	A
CADMIUM		0.25	J	P	0.22	U	A	0.21	U	A	0.19	U	A
CHROMIUM		0.39	J	P	0.37	J	P	0.34	J	P	0.34	J	P
COBALT		0.43	J	P	0.088	U	A	0.1	U	A	0.078	U	A
COPPER		6.5			6.5			7.1			7.7		
LEAD		0.23	J	P	0.2	J	P	0.16	J	P	0.17	J	P
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.7	J	P	1.6	J	P	1.6	J	P	1.7	J	P
NICKEL		2.5			2			2			2		
SELENIUM		0.67	J	P	0.59	J	P	0.53	J	P	0.69	J	P
SILVER		0.009	U	A	0.01	U	A	0.009	U	A	0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.3	U	A	1.3	U	A	1.2	U	A	1.3	U	A
VANADIUM		0.33	J	P	0.17	J	P	0.19	J	P	0.4	J	P
ZINC		6.3	J	P	4.7	J	P	6.7	J	P	7	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW44A-080514			MSA-SW44B-080514			MSA-SW44C-080514			MSA-SW44D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-29			240-40408-30			240-40408-31			240-40408-32		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.19	J	P	0.35	U	A	0.36	U	A	0.35	U	A
ARSENIC		1.5	U	A	1.1	U	A	1.2	U	A	1.2	U	A
BARIUM		18			18	J	N	17	J	N	17		
BERYLLIUM		0.054	U	A	0.031	UJ	N	0.031	UJ	N	0.031	UJ	N
CADMIUM		0.17	U	A	0.18	U	A	0.17	U	A	0.15	U	A
CHROMIUM		0.48	J	P	0.32	J	P	0.35	J	P	0.42	J	P
COBALT		0.14	U	A	0.067	U	A	0.055	U	A	0.056	U	A
COPPER		6.3			7.4			6.8			6.9		
LEAD		0.14	J	P	0.14	U		0.14	U		0.14	U	
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.6	J	P	1.8	J	P	1.5	J	P	1.4	J	P
NICKEL		2.1			1.9	J	P	2			1.9	J	P
SELENIUM		0.53	J	P	0.34	UJ	N	0.34	UJ	N	0.34	U	
SILVER		0.0083	U		0.0083	UJ	N	0.0083	UJ	N	0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		1.2	U	A	0.14	U	A	0.1	U	A	0.085	U	A
VANADIUM		0.32	J	P	0.89	J	P	0.85	J	P	0.85	J	P
ZINC		7.1	J	P	3.3	J	P	4.3	J	P	5.7	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW45A-080514			MSA-SW45B-080514			MSA-SW45C-080514			MSA-SW45D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-33			240-40408-34			240-40408-35			240-40408-36		
FRACTION: MF	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.37	U	A	0.31	U	A	0.34	U	A	0.35	U	A
ARSENIC		1.1	U	A	1.1	U	A	1.2	U	A	1.1	U	A
BARIUM		17			17			18			18		
BERYLLIUM		0.031	UJ	N	0.031	UJ	N	0.031	UJ	N	0.031	UJ	N
CADMIUM		0.11	U	A	0.12	U	A	0.13	U	A	0.15	U	A
CHROMIUM		0.35	J	P	0.37	J	P	0.32	J	P	0.32	J	P
COBALT		0.085	U	A	0.1	J	P	0.063	U	A	0.059	U	A
COPPER		5.1			5.6			6			6.4		
LEAD		0.14	U		0.14	U		0.14	U		0.14	U	
MERCURY		0.12	UJ	C	0.12	UJ	C	0.12	UJ	C	0.12	UJ	C
MOLYBDENUM		1.4	J	P	1.4	J	P	1.4	J	P	1.4	J	P
NICKEL		1.8	J	P	1.8	J	P	1.9	J	P	1.9	J	P
SELENIUM		0.34	U		0.34	U		0.34	U		0.34	U	
SILVER		0.0083	U		0.0083	U		0.0083	U		0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.082	U	A	0.085	U	A	0.077	U	A	0.068	U	A
VANADIUM		0.89	J	P	0.92	J	P	0.86	J	P	0.91	J	P
ZINC		2.1	U		3	J	P	2.9	J	P	3.4	J	P

PROJ_NO: 06183	NSAMPLE	MSA-SW37A-080514			MSA-SW37B-080514			MSA-SW37C-080514			MSA-SW37D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-1			240-40408-2			240-40408-3			240-40408-4		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		59			59			57			60		
HARDNESS AS CACO3		250			250			240			250		
MAGNESIUM HARDNESS AS CACO3		190			190			180			190		

PROJ_NO: 06183	NSAMPLE	MSA-SW38A-080514			MSA-SW38B-080514			MSA-SW38C-080514			MSA-SW38D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-5			240-40408-6			240-40408-7			240-40408-8		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		57			57			61			61		
HARDNESS AS CACO3		240			250			260			260		
MAGNESIUM HARDNESS AS CACO3		190			190			200			200		

PROJ_NO: 06183	NSAMPLE	MSA-SW39A-080514			MSA-SW39B-080514			MSA-SW39C-080514			MSA-SW39D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-9			240-40408-10			240-40408-11			240-40408-12		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		62			62			61			63		
HARDNESS AS CACO3		270			270			260			270		
MAGNESIUM HARDNESS AS CACO3		210			210			200			200		

PROJ_NO: 06183	NSAMPLE	MSA-SW40A-080514			MSA-SW40B-080514			MSA-SW40C-080514			MSA-SW40D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-13			240-40408-14			240-40408-15			240-40408-16		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		60			59			59			62		
HARDNESS AS CACO3		260			250			250			260		
MAGNESIUM HARDNESS AS CACO3		200			190			190			200		

PROJ_NO: 06183	NSAMPLE	MSA-SW41A-080514			MSA-SW41B-080514			MSA-SW41C-080514			MSA-SW41D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-17			240-40408-18			240-40408-19			240-40408-20		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		57			57			59			63		
HARDNESS AS CACO3		250			240			250			260		
MAGNESIUM HARDNESS AS CACO3		190			190			190			200		

PROJ_NO: 06183	NSAMPLE	MSA-SW42A-080514			MSA-SW42B-080514			MSA-SW42C-080514			MSA-SW42D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-21			240-40408-22			240-40408-23			240-40408-24		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		58			57			65			61		
HARDNESS AS CACO3		240			230			280			260		
MAGNESIUM HARDNESS AS CACO3		180			180			210			200		

PROJ_NO: 06183	NSAMPLE	MSA-SW43A-080514			MSA-SW43B-080514			MSA-SW43C-080514			MSA-SW43D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-25			240-40408-26			240-40408-27			240-40408-28		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		66			63			63			65		
HARDNESS AS CACO3		280			270			270			280		
MAGNESIUM HARDNESS AS CACO3		210			210			210			210		

PROJ_NO: 06183	NSAMPLE	MSA-SW44A-080514			MSA-SW44B-080514			MSA-SW44C-080514			MSA-SW44D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-29			240-40408-30			240-40408-31			240-40408-32		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		63			59			59			59		
HARDNESS AS CACO3		270			280			280			270		
MAGNESIUM HARDNESS AS CACO3		210			220			220			220		

PROJ_NO: 06183	NSAMPLE	MSA-SW45A-080514			MSA-SW45B-080514			MSA-SW45C-080514			MSA-SW45D-080514		
SDG: 240-40408-1	LAB_ID	240-40408-33			240-40408-34			240-40408-35			240-40408-36		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		60			62			61			60		
HARDNESS AS CACO3		290			280			280			290		
MAGNESIUM HARDNESS AS CACO3		230			220			220			230		

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37A-080514 Lab Sample ID: 240-40408-1

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:12

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.42	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L		B	1	6020
7440-41-7	Beryllium	0.31	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.31	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.34	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.17	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.8	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.44	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.5	2.0	0.088	ug/L	J	B	1	6020
7782-49-2	Selenium	1.1	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.017	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.49	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	10	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	0.73	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37B-080514 Lab Sample ID: 240-40408-2

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:17

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.32	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L		B	1	6020
7440-41-7	Beryllium	0.20	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.23	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.26	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.091	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.0	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.28	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J	B	1	6020
7782-49-2	Selenium	1.1	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.39	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.6	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	0.96	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37C-080514 Lab Sample ID: 240-40408-3

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:21

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.29	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L		B	1	6020
7440-41-7	Beryllium	0.14	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.20	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.34	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.077	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.1	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.24	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.7	2.0	0.088	ug/L	J	B	1	6020
7782-49-2	Selenium	0.82	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.30	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.7	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.1	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37D-080514 Lab Sample ID: 240-40408-4

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:25

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.30	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L		B	1	6020
7440-41-7	Beryllium	0.12	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.20	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.25	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.081	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.3	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.24	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.8	2.0	0.088	ug/L	J	B	1	6020
7782-49-2	Selenium	0.80	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.36	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	10	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.1	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38A-080514 Lab Sample ID: 240-40408-5

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:21

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.29	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L		B	1	6020
7440-41-7	Beryllium	0.096	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.46	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.51	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.47	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.1	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.22	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.2	2.0	0.088	ug/L		B	1	6020
7782-49-2	Selenium	0.86	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.36	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.6	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.1	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38B-080514 Lab Sample ID: 240-40408-6

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:25

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.29	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L		B	1	6020
7440-41-7	Beryllium	0.086	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.19	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.23	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.11	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.8	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.21	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J	B	1	6020
7782-49-2	Selenium	0.73	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.31	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	7.5	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.2	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38C-080514 Lab Sample ID: 240-40408-7

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:28

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.69	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.3	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.18	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.30	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.37	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.18	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	10	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.61	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.80	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.010	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.66	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	9.9	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	0.67	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38D-080514 Lab Sample ID: 240-40408-8

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:32

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.61	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	19	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.32	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.33	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.36	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.22	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	11	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.57	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.99	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.016	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.76	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.9	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39A-080514 Lab Sample ID: 240-40408-9

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 09:49

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.47	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.23	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.10	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.28	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.14	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	9.0	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.42	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.7	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.86	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.36	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	4.2	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.1	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39B-080514 Lab Sample ID: 240-40408-10

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 09:56

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.48	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.3	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.15	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.15	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.31	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.12	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	10	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.37	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.91	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.61	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	6.8	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	0.95	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39C-080514 Lab Sample ID: 240-40408-11

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:00

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.44	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.11	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.17	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.28	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.093	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	10	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.33	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.98	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	5.0	5.0	0.15	ug/L	U		1	6020
7440-66-6	Zinc	8.1	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.1	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39D-080514 Lab Sample ID: 240-40408-12

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:04

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.38	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.11	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.14	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.30	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.058	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	11	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.29	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.82	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	5.0	5.0	0.15	ug/L	U		1	6020
7440-66-6	Zinc	7.1	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.2	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40A-080514 Lab Sample ID: 240-40408-13

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:37

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.40	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.073	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.23	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.32	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.23	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	10	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.25	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.1	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.86	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.19	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	9.7	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40B-080514 Lab Sample ID: 240-40408-14

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:41

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.39	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.074	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.28	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.28	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.23	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	11	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.25	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.63	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.20	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.0	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.4	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40C-080514 Lab Sample ID: 240-40408-15

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:45

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.37	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.060	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.21	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.26	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.097	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	10	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.23	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.8	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.84	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	5.0	5.0	0.15	ug/L	U		1	6020
7440-66-6	Zinc	8.0	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.4	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40D-080514 Lab Sample ID: 240-40408-16

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:48

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.38	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.069	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.19	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.29	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.11	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	11	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.23	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.68	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.16	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.2	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.5	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41A-080514 Lab Sample ID: 240-40408-17

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:05

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.37	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.069	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.23	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.28	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.25	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	9.4	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.24	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.79	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.28	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	7.8	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.4	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41B-080514 Lab Sample ID: 240-40408-18

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:09

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.33	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.081	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.19	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.26	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.18	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	9.3	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.21	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.8	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.68	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.28	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	6.7	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.4	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41C-080514 Lab Sample ID: 240-40408-19

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:13

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.44	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.064	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.26	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.35	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.22	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	9.6	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.32	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.73	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.28	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	9.2	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41D-080514 Lab Sample ID: 240-40408-20

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:16

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.35	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.045	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.17	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.29	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.068	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	28	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.22	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.55	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.32	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.9	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.2	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42A-080514 Lab Sample ID: 240-40408-21

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:55

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.35	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.046	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.20	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.27	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.11	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	9.5	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.22	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.61	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.19	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	13	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42B-080514 Lab Sample ID: 240-40408-22

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:58

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.34	2.0	0.11	ug/L	J	B	1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.043	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.19	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.26	2.0	0.13	ug/L	J	B	1	6020
7440-48-4	Cobalt	0.12	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	9.0	2.0	0.24	ug/L		B	1	6020
7439-92-1	Lead	0.20	1.0	0.14	ug/L	J	B	1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.7	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	0.60	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	5.0	5.0	0.15	ug/L	U		1	6020
7440-66-6	Zinc	7.4	20	2.1	ug/L	J	B	1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42C-080514 Lab Sample ID: 240-40408-23

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:02

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.25	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.3	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.064	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.25	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.38	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.14	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.1	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.38	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.1	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.40	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.011	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.82	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	8.2	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.86	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42D-080514 Lab Sample ID: 240-40408-24

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:06

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.32	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.4	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.14	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.37	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.38	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.16	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.6	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.31	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.66	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.016	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.68	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	6.1	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43A-080514 Lab Sample ID: 240-40408-25

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:47

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.24	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	19	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.13	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.25	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.39	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.43	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.5	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.23	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.5	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.67	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.0090	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.33	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	6.3	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43B-080514 Lab Sample ID: 240-40408-26

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:51

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.20	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.076	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.22	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.37	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.088	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.5	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.20	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.59	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.010	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.17	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	4.7	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43C-080514 Lab Sample ID: 240-40408-27

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:55

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.20	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.079	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.21	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.34	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.10	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.1	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.16	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.53	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	0.0090	1.0	0.0083	ug/L	J		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.19	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	6.7	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	1.2	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43D-080514 Lab Sample ID: 240-40408-28

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:00

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.19	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.6	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.071	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.19	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.34	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.078	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.7	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.17	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.7	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.69	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.40	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	7.0	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	1.3	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44A-080514 Lab Sample ID: 240-40408-29

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:32

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.19	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.5	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	0.054	1.0	0.031	ug/L	J		1	6020
7440-43-9	Cadmium	0.17	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.48	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.14	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.3	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	0.14	1.0	0.14	ug/L	J		1	6020
7439-98-7	Molybdenum	1.6	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.1	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	0.53	5.0	0.34	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.32	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	7.1	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	1.2	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44B-080514 Lab Sample ID: 240-40408-30

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:35

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.35	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.1	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.18	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.32	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.067	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	7.4	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.8	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.89	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	3.3	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.14	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44C-080514 Lab Sample ID: 240-40408-31

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:38

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.36	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.2	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.17	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.35	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.055	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.8	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.5	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	0.088	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.85	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	4.3	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.10	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44D-080514 Lab Sample ID: 240-40408-32

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:42

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.35	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.2	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.15	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.42	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.056	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.9	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.85	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	5.7	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.085	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45A-080514 Lab Sample ID: 240-40408-33

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:10

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.37	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.1	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.11	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.35	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.085	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	5.1	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.8	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.89	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.1	ug/L	U		1	6020
7440-33-7	Tungsten	0.082	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45B-080514 Lab Sample ID: 240-40408-34

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:15

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.31	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.1	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	17	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.12	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.37	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.10	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	5.6	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.8	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.92	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	3.0	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.085	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45C-080514 Lab Sample ID: 240-40408-35

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:19

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.34	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.2	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.13	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.32	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.063	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.0	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.86	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	2.9	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.077	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45D-080514 Lab Sample ID: 240-40408-36

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:22

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.35	2.0	0.11	ug/L	J		1	6020
7440-38-2	Arsenic	1.1	5.0	0.063	ug/L	J	B	1	6020
7440-39-3	Barium	18	5.0	0.32	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.031	ug/L	U		1	6020
7440-43-9	Cadmium	0.15	1.0	0.026	ug/L	J		1	6020
7440-47-3	Chromium	0.32	2.0	0.13	ug/L	J		1	6020
7440-48-4	Cobalt	0.059	1.0	0.020	ug/L	J		1	6020
7440-50-8	Copper	6.4	2.0	0.24	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.14	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	10	0.81	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	0.088	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.34	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.0083	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.40	ug/L	U		1	6020
7440-62-2	Vanadium	0.91	5.0	0.15	ug/L	J		1	6020
7440-66-6	Zinc	3.4	20	2.1	ug/L	J		1	6020
7440-33-7	Tungsten	0.068	10	0.017	ug/L	J	B	1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37A-080514 Lab Sample ID: 240-40408-1

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:12

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37B-080514 Lab Sample ID: 240-40408-2

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:17

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37C-080514 Lab Sample ID: 240-40408-3

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:21

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	240	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	57	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	180	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37D-080514 Lab Sample ID: 240-40408-4

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:25

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	60	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38A-080514 Lab Sample ID: 240-40408-5

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:21

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	240	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	57	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38B-080514 Lab Sample ID: 240-40408-6

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:25

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	57	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38C-080514 Lab Sample ID: 240-40408-7

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:28

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	61	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38D-080514 Lab Sample ID: 240-40408-8

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:32

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	61	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39A-080514 Lab Sample ID: 240-40408-9

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 09:49

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	62	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39B-080514 Lab Sample ID: 240-40408-10

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 09:56

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	62	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39C-080514 Lab Sample ID: 240-40408-11

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:00

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	61	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39D-080514 Lab Sample ID: 240-40408-12

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:04

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	63	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40A-080514 Lab Sample ID: 240-40408-13

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:37

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	60	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40B-080514 Lab Sample ID: 240-40408-14

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:41

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40C-080514 Lab Sample ID: 240-40408-15

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:45

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40D-080514 Lab Sample ID: 240-40408-16

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:48

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	62	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41A-080514 Lab Sample ID: 240-40408-17

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:05

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	57	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41B-080514 Lab Sample ID: 240-40408-18

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:09

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	240	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	57	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41C-080514 Lab Sample ID: 240-40408-19

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:13

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41D-080514 Lab Sample ID: 240-40408-20

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:16

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	63	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42A-080514 Lab Sample ID: 240-40408-21

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:55

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	240	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	58	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	180	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42B-080514 Lab Sample ID: 240-40408-22

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:58

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	230	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	57	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	180	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42C-080514 Lab Sample ID: 240-40408-23

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:02

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	65	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42D-080514 Lab Sample ID: 240-40408-24

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:06

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	260	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	61	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	200	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43A-080514 Lab Sample ID: 240-40408-25

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:47

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	66	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43B-080514 Lab Sample ID: 240-40408-26

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:51

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	63	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43C-080514 Lab Sample ID: 240-40408-27

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:55

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	63	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43D-080514 Lab Sample ID: 240-40408-28

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 11:00

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	65	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44A-080514 Lab Sample ID: 240-40408-29

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:32

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	63	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	210	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44B-080514 Lab Sample ID: 240-40408-30

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:35

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	220	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44C-080514 Lab Sample ID: 240-40408-31

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:38

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	220	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44D-080514 Lab Sample ID: 240-40408-32

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:42

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	270	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	220	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45A-080514 Lab Sample ID: 240-40408-33

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:10

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	290	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	60	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	230	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45B-080514 Lab Sample ID: 240-40408-34

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:15

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	62	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	220	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45C-080514 Lab Sample ID: 240-40408-35

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:19

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	280	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	61	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	220	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45D-080514 Lab Sample ID: 240-40408-36

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 10:22

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	290	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	60	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	230	21		mg/L			1	SM 2340B

APPENDIX C
SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-40408-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-SW43C-080514	240-40408-27	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW41C-080514	240-40408-19	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW41D-080514	240-40408-20	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW42A-080514	240-40408-21	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW42B-080514	240-40408-22	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW42C-080514	240-40408-23	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW42D-080514	240-40408-24	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW41B-080514	240-40408-18	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW43B-080514	240-40408-26	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW43D-080514	240-40408-28	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW44A-080514	240-40408-29	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW44C-080514	240-40408-31	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW44D-080514	240-40408-32	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW45A-080514	240-40408-33	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW45B-080514	240-40408-34	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-SW45C-080514	240-40408-35	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW45D-080514	240-40408-36	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW43A-080514	240-40408-25	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW38B-080514	240-40408-6	NM	08/05/2014	08/08/2014	08/11/2014	3	3	6
HG	UG/L	MSA-SW44B-080514	240-40408-30	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW41A-080514	240-40408-17	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW37A-080514	240-40408-1	NM	08/05/2014	08/08/2014	08/11/2014	3	3	6
HG	UG/L	MSA-SW37B-080514	240-40408-2	NM	08/05/2014	08/08/2014	08/11/2014	3	3	6
HG	UG/L	MSA-SW37C-080514	240-40408-3	NM	08/05/2014	08/08/2014	08/11/2014	3	3	6
HG	UG/L	MSA-SW38A-080514	240-40408-5	NM	08/05/2014	08/08/2014	08/11/2014	3	3	6
HG	UG/L	MSA-SW38C-080514	240-40408-7	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW38D-080514	240-40408-8	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW40B-080514	240-40408-14	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW40D-080514	240-40408-16	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW37D-080514	240-40408-4	NM	08/05/2014	08/08/2014	08/11/2014	3	3	6
HG	UG/L	MSA-SW40C-080514	240-40408-15	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW39A-080514	240-40408-9	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW40A-080514	240-40408-13	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-SW39D-080514	240-40408-12	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW39C-080514	240-40408-11	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HG	UG/L	MSA-SW39B-080514	240-40408-10	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW38D-080514	240-40408-8	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW37A-080514	240-40408-1	NM	08/05/2014	08/08/2014	08/12/2014	3	4	7
M	UG/L	MSA-SW40D-080514	240-40408-16	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW41A-080514	240-40408-17	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW40B-080514	240-40408-14	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW40A-080514	240-40408-13	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW39D-080514	240-40408-12	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW39C-080514	240-40408-11	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW39B-080514	240-40408-10	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW39A-080514	240-40408-9	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW40C-080514	240-40408-15	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW38C-080514	240-40408-7	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW38B-080514	240-40408-6	NM	08/05/2014	08/08/2014	08/13/2014	3	5	8
M	UG/L	MSA-SW38B-080514	240-40408-6	NM	08/05/2014	08/08/2014	08/12/2014	3	4	7
M	UG/L	MSA-SW38A-080514	240-40408-5	NM	08/05/2014	08/08/2014	08/13/2014	3	5	8

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	MSA-SW38A-080514	240-40408-5	NM	08/05/2014	08/08/2014	08/12/2014	3	4	7
M	UG/L	MSA-SW37D-080514	240-40408-4	NM	08/05/2014	08/08/2014	08/13/2014	3	5	8
M	UG/L	MSA-SW37C-080514	240-40408-3	NM	08/05/2014	08/08/2014	08/13/2014	3	5	8
M	UG/L	MSA-SW37B-080514	240-40408-2	NM	08/05/2014	08/08/2014	08/13/2014	3	5	8
M	UG/L	MSA-SW37A-080514	240-40408-1	NM	08/05/2014	08/08/2014	08/13/2014	3	5	8
M	UG/L	MSA-SW41B-080514	240-40408-18	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW37D-080514	240-40408-4	NM	08/05/2014	08/08/2014	08/12/2014	3	4	7
M	UG/L	MSA-SW37B-080514	240-40408-2	NM	08/05/2014	08/08/2014	08/12/2014	3	4	7
M	UG/L	MSA-SW44C-080514	240-40408-31	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW37C-080514	240-40408-3	NM	08/05/2014	08/08/2014	08/12/2014	3	4	7
M	UG/L	MSA-SW45C-080514	240-40408-35	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW45B-080514	240-40408-34	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW41C-080514	240-40408-19	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW44D-080514	240-40408-32	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW45D-080514	240-40408-36	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW44B-080514	240-40408-30	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW44A-080514	240-40408-29	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8
M	UG/L	MSA-SW43C-080514	240-40408-27	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	MSA-SW43B-080514	240-40408-26	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8
M	UG/L	MSA-SW43A-080514	240-40408-25	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8
M	UG/L	MSA-SW42D-080514	240-40408-24	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8
M	UG/L	MSA-SW42C-080514	240-40408-23	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8
M	UG/L	MSA-SW42B-080514	240-40408-22	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW42A-080514	240-40408-21	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
M	UG/L	MSA-SW43D-080514	240-40408-28	NM	08/05/2014	08/11/2014	08/13/2014	6	2	8
M	UG/L	MSA-SW45A-080514	240-40408-33	NM	08/05/2014	08/11/2014	08/14/2014	6	3	9
M	UG/L	MSA-SW41D-080514	240-40408-20	NM	08/05/2014	08/11/2014	08/12/2014	6	1	7
HARD	MG/L	MSA-SW42A-080514	240-40408-21	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW43D-080514	240-40408-28	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW43C-080514	240-40408-27	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW43B-080514	240-40408-26	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW43A-080514	240-40408-25	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW42D-080514	240-40408-24	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW42B-080514	240-40408-22	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW42C-080514	240-40408-23	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW44A-080514	240-40408-29	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HARD	MG/L	MSA-SW44B-080514	240-40408-30	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW44C-080514	240-40408-31	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW44D-080514	240-40408-32	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW45A-080514	240-40408-33	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW45B-080514	240-40408-34	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW41D-080514	240-40408-20	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW45D-080514	240-40408-36	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW39C-080514	240-40408-11	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW45C-080514	240-40408-35	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW39B-080514	240-40408-10	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW37B-080514	240-40408-2	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW37A-080514	240-40408-1	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW37C-080514	240-40408-3	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW37D-080514	240-40408-4	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW38A-080514	240-40408-5	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW38B-080514	240-40408-6	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW38C-080514	240-40408-7	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW40A-080514	240-40408-13	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HARD	MG/L	MSA-SW39A-080514	240-40408-9	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW41C-080514	240-40408-19	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW39D-080514	240-40408-12	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW40B-080514	240-40408-14	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW40C-080514	240-40408-15	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW40D-080514	240-40408-16	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW41A-080514	240-40408-17	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW41B-080514	240-40408-18	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
HARD	MG/L	MSA-SW38D-080514	240-40408-8	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW42D-080514	240-40408-24	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW45C-080514	240-40408-35	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW45D-080514	240-40408-36	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW37C-080514	240-40408-3	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW43B-080514	240-40408-26	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW39C-080514	240-40408-11	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW39B-080514	240-40408-10	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW39A-080514	240-40408-9	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW38D-080514	240-40408-8	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MSA-SW38C-080514	240-40408-7	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW38B-080514	240-40408-6	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW40A-080514	240-40408-13	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW37D-080514	240-40408-4	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW40B-080514	240-40408-14	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW37B-080514	240-40408-2	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW37A-080514	240-40408-1	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	EL-SW01D-080514	240-40408-40	NM	08/05/2014	08/14/2014	08/14/2014	9	0	9
OV	UG/L	EL-SW01C-080514	240-40408-39	NM	08/05/2014	08/14/2014	08/14/2014	9	0	9
OV	UG/L	EL-SW01B-080514	240-40408-38	NM	08/05/2014	08/14/2014	08/14/2014	9	0	9
OV	UG/L	EL-SW01A-080514	240-40408-37	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	TB-080514	240-40408-41	NM	08/05/2014	08/14/2014	08/14/2014	9	0	9
OV	UG/L	MSA-SW38A-080514	240-40408-5	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW42B-080514	240-40408-22	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW45A-080514	240-40408-33	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW44D-080514	240-40408-32	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW44C-080514	240-40408-31	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW44B-080514	240-40408-30	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MSA-SW44A-080514	240-40408-29	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW43D-080514	240-40408-28	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW43C-080514	240-40408-27	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW39D-080514	240-40408-12	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW42C-080514	240-40408-23	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW45B-080514	240-40408-34	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW42A-080514	240-40408-21	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW41D-080514	240-40408-20	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW41C-080514	240-40408-19	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7
OV	UG/L	MSA-SW41B-080514	240-40408-18	NM	08/05/2014	08/14/2014	08/14/2014	9	0	9
OV	UG/L	MSA-SW41A-080514	240-40408-17	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW40D-080514	240-40408-16	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW40C-080514	240-40408-15	NM	08/05/2014	08/11/2014	08/11/2014	6	0	6
OV	UG/L	MSA-SW43A-080514	240-40408-25	NM	08/05/2014	08/12/2014	08/12/2014	7	0	7

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water Sampling

Report Number: 240-40408-1

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

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

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

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

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

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

RECEIPT

The samples were received on 8/6/2014 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.2° C and 4.8° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3), MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35), MSA-SW45D-080514 (240-40408-36), EL-SW01A-080514 (240-40408-37), EL-SW01B-080514 (240-40408-38), EL-SW01C-080514 (240-40408-39), EL-SW01D-080514 (240-40408-40) and TB-080514 (240-40408-41) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/11/2014, 08/12/2014 and 08/14/2014.

Methylene Chloride was detected in method blank MB 240-142823/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The laboratory control sample (LCS) for batch 142823 recovered outside control limits for the following analyte(s): 2,2-Dichloropropene. 2,2-Dichloropropene has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

There was no MS/MSD run in batch 142823 due to an instrument failure: EL-SW01B-080514 (240-40408-38), EL-SW01C-080514 (240-40408-39), EL-SW01D-080514 (240-40408-40), MSA-SW41B-080514 (240-40408-18), and TB-080514 (240-40408-41).

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-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3),

MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35) and MSA-SW45D-080514 (240-40408-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/08/2014 and 08/11/2014 and analyzed on 08/12/2014, 08/13/2014 and 08/14/2014.

Several analytes were detected in method blank MB 240-142080/1-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.

Copper was detected in method blank MB 240-142276/1-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 240-142276/1-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.

Arsenic and Tungsten were detected in method blank MB 240-142287/1-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.

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-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3), MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35) and MSA-SW45D-080514 (240-40408-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/08/2014 and 08/11/2014 and analyzed on 08/11/2014 and 08/12/2014.

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-080514 (240-40408-1), MSA-SW37B-080514 (240-40408-2), MSA-SW37C-080514 (240-40408-3), MSA-SW37D-080514 (240-40408-4), MSA-SW38A-080514 (240-40408-5), MSA-SW38B-080514 (240-40408-6), MSA-SW38C-080514 (240-40408-7), MSA-SW38D-080514 (240-40408-8), MSA-SW39A-080514 (240-40408-9), MSA-SW39B-080514 (240-40408-10), MSA-SW39C-080514 (240-40408-11), MSA-SW39D-080514 (240-40408-12), MSA-SW40A-080514 (240-40408-13), MSA-SW40B-080514 (240-40408-14), MSA-SW40C-080514 (240-40408-15), MSA-SW40D-080514 (240-40408-16), MSA-SW41A-080514 (240-40408-17), MSA-SW41B-080514 (240-40408-18), MSA-SW41C-080514 (240-40408-19), MSA-SW41D-080514 (240-40408-20), MSA-SW42A-080514 (240-40408-21), MSA-SW42B-080514 (240-40408-22), MSA-SW42C-080514 (240-40408-23), MSA-SW42D-080514 (240-40408-24), MSA-SW43A-080514 (240-40408-25), MSA-SW43B-080514 (240-40408-26), MSA-SW43C-080514 (240-40408-27), MSA-SW43D-080514 (240-40408-28), MSA-SW44A-080514 (240-40408-29), MSA-SW44B-080514 (240-40408-30), MSA-SW44C-080514 (240-40408-31), MSA-SW44D-080514 (240-40408-32), MSA-SW45A-080514 (240-40408-33), MSA-SW45B-080514 (240-40408-34), MSA-SW45C-080514 (240-40408-35) and MSA-SW45D-080514 (240-40408-36) were analyzed for dissolved hardness (as CaCO3) by calculation in accordance with SM 2340B. The samples were analyzed on 08/11/2014.

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

SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-40408-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-40408-1	MSA-SW37A-080514	Water	08/05/2014 1212	08/06/2014 0920
240-40408-2	MSA-SW37B-080514	Water	08/05/2014 1217	08/06/2014 0920
240-40408-3	MSA-SW37C-080514	Water	08/05/2014 1221	08/06/2014 0920
240-40408-4	MSA-SW37D-080514	Water	08/05/2014 1225	08/06/2014 0920
240-40408-5	MSA-SW38A-080514	Water	08/05/2014 1121	08/06/2014 0920
240-40408-6	MSA-SW38B-080514	Water	08/05/2014 1125	08/06/2014 0920
240-40408-7	MSA-SW38C-080514	Water	08/05/2014 1128	08/06/2014 0920
240-40408-8	MSA-SW38D-080514	Water	08/05/2014 1132	08/06/2014 0920
240-40408-9	MSA-SW39A-080514	Water	08/05/2014 0949	08/06/2014 0920
240-40408-10	MSA-SW39B-080514	Water	08/05/2014 0956	08/06/2014 0920
240-40408-11	MSA-SW39C-080514	Water	08/05/2014 1000	08/06/2014 0920
240-40408-12	MSA-SW39D-080514	Water	08/05/2014 1004	08/06/2014 0920
240-40408-13	MSA-SW40A-080514	Water	08/05/2014 1137	08/06/2014 0920
240-40408-14	MSA-SW40B-080514	Water	08/05/2014 1141	08/06/2014 0920
240-40408-15	MSA-SW40C-080514	Water	08/05/2014 1145	08/06/2014 0920
240-40408-16	MSA-SW40D-080514	Water	08/05/2014 1148	08/06/2014 0920
240-40408-17	MSA-SW41A-080514	Water	08/05/2014 1105	08/06/2014 0920
240-40408-18	MSA-SW41B-080514	Water	08/05/2014 1109	08/06/2014 0920
240-40408-19	MSA-SW41C-080514	Water	08/05/2014 1113	08/06/2014 0920
240-40408-20	MSA-SW41D-080514	Water	08/05/2014 1116	08/06/2014 0920
240-40408-21	MSA-SW42A-080514	Water	08/05/2014 1155	08/06/2014 0920
240-40408-22	MSA-SW42B-080514	Water	08/05/2014 1158	08/06/2014 0920
240-40408-23	MSA-SW42C-080514	Water	08/05/2014 1202	08/06/2014 0920
240-40408-24	MSA-SW42D-080514	Water	08/05/2014 1206	08/06/2014 0920
240-40408-25	MSA-SW43A-080514	Water	08/05/2014 1047	08/06/2014 0920
240-40408-26	MSA-SW43B-080514	Water	08/05/2014 1051	08/06/2014 0920
240-40408-27	MSA-SW43C-080514	Water	08/05/2014 1055	08/06/2014 0920
240-40408-28	MSA-SW43D-080514	Water	08/05/2014 1100	08/06/2014 0920
240-40408-29	MSA-SW44A-080514	Water	08/05/2014 1032	08/06/2014 0920
240-40408-30	MSA-SW44B-080514	Water	08/05/2014 1035	08/06/2014 0920
240-40408-31	MSA-SW44C-080514	Water	08/05/2014 1038	08/06/2014 0920
240-40408-32	MSA-SW44D-080514	Water	08/05/2014 1042	08/06/2014 0920
240-40408-33	MSA-SW45A-080514	Water	08/05/2014 1010	08/06/2014 0920
240-40408-34	MSA-SW45B-080514	Water	08/05/2014 1015	08/06/2014 0920
240-40408-35	MSA-SW45C-080514	Water	08/05/2014 1019	08/06/2014 0920
240-40408-36	MSA-SW45D-080514	Water	08/05/2014 1022	08/06/2014 0920
240-40408-37	EL-SW01A-080514	Water	08/05/2014 0931	08/06/2014 0920
240-40408-38	EL-SW01B-080514	Water	08/05/2014 0936	08/06/2014 0920
240-40408-39	EL-SW01C-080514	Water	08/05/2014 0939	08/06/2014 0920
240-40408-40	EL-SW01D-080514	Water	08/05/2014 0941	08/06/2014 0920
240-40408-41	TB-080514	Water	08/05/2014 0000	08/06/2014 0920

METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-40408-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Priority Pollutants	TAL CAN	SW846 8260B	
Purge and Trap	TAL CAN		SW846 5030B
Metals (ICP/MS)	TAL CAN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL CAN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL CAN	SW846 7470A	
Preparation, Mercury	TAL CAN		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
Total Hardness (as CaCO3) by calculation	TAL CAN	SM SM 2340B	
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL CAN = TestAmerica Canton

Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

2.2.4.8

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 112I06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			Sampler:
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW37A-080514	8/5/14	1212	SW	Water	4	x	x	x	x	
MSA-SW37B-080514	8/5/14	1217	SW	Water	4	x	x	x	x	
MSA-SW37C-080514	8/5/14	1221	SW	Water	4	x	x	x	x	
MSA-SW37D-080514	8/5/14	1225	SW	Water	4	x	x	x	x	
MSA-SW38A-080514	8/5/14	1121	SW	Water	4	x	x	x	x	
MSA-SW38B-080514	8/5/14	1125	SW	Water	4	x	x	x	x	
MSA-SW38C-080514	8/5/14	~~1132~~ 1128	SW	Water	4	x	x	x	x	
MSA-SW38D-080514	8/5/14	1132	SW	Water	4	x	x	x	x	
MSA-SW39A-080514	8/5/14	0949	SW	Water	4	x	x	x	x	
MSA-SW39B-080514	8/5/14	0956	SW	Water	4	x	x	x	x	
MSA-SW39C-080514	8/5/14	1000	SW	Water	4	x	x	x	x	
MSA-SW39D-080514	8/5/14	1006	SW	Water	4	x	x	x	x	

Preservation Used: (1= Ice) 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

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

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

Special Instructions/QC Requirements & Comments: DISSOLVED METALS FILTERED IN FIELD

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/5/14 1500		TA-Canton	8-6-14 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 112IC06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: J. Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW40A-080514	8/5/14	1137	SW	Water	4	x	x	x	x	
MSA-SW40B-080514	8/5/14	1141	SW	Water	4	x	x	x	x	
MSA-SW40C-080514	8/5/14	1145	SW	Water	4	x	x	x	x	
MSA-SW40D-080514	8/5/14	1148	SW	Water	4	x	x	x	x	
MSA-SW41A-080514	8/5/14	1105	SW	Water	4	x	x	x	x	
MSA-SW41B-080514	8/5/14	1109	SW	Water	4	x	x	x	x	
MSA-SW41C-080514	8/5/14	1113	SW	Water	4	x	x	x	x	
MSA-SW41D-080514	8/5/14	1116	SW	Water	4	x	x	x	x	
MSA-SW42A-080514	8/5/14	1155	SW	Water	4	x	x	x	x	
MSA-SW42B-080514	8/5/14	1158	SW	Water	4	x	x	x	x	
MSA-SW42C-080514	8/5/14	1202	SW	Water	4	x	x	x	x	
MSA-SW42D-080514	8/5/14	1206	SW	Water	4	x	x	x	x	

Preservation Used: (1)= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
(X) 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 (X) Disposal By Lab ☐ Archive For ☐ Months

Special Instructions/QC Requirements & Comments: DISSOLVED METALS FILTERED IN FIELD

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/5/14 1500		TA Canton	8-6-14 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 112IC06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler: J. Mills

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW43A-080514	8/5/14	1047	SW	Water	4	x	x	x	x	
MSA-SW43B-080514	8/5/14	1051	SW	Water	4	x	x	x	x	
MSA-SW43C-080514	8/5/14	1055	SW	Water	4	x	x	x	x	
MSA-SW43D-080514	8/5/14	1100	SW	Water	4	x	x	x	x	
MSA-SW44A-080514	8/5/14	1032	SW	Water	4	x	x	x	x	
MSA-SW44B-080514	8/5/14	1035	SW	Water	4	x	x	x	x	
MSA-SW44C-080514	8/5/14	1038	SW	Water	4	x	x	x	x	
MSA-SW44D-080514	8/5/14	1042	SW	Water	4	x	x	x	x	
MSA-SW45A-080514	8/5/14	1010	SW	Water	4	x	x	x	x	
MSA-SW45B-080514	8/5/14	1015	SW	Water	4	x	x	x	x	
MSA-SW45C-080514	8/5/14	1019	SW	Water	4	x	x	x	x	
MSA-SW45D-080514	8/5/14	1022	SW	Water	4	x	x	x	x	

Preservation Used: 1= Ice. 2= HCl: 3= H2SO4: 4=HNO3: 5=NaOH: 6= Other

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

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

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/5/14 1500	[signature]	TA Canton	8-6-14 9:20

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	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. 112IC06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			Sampler: J. Mills
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
EL-SW01A-080514	8/5/14	0931	SW	AQ	3		x	
EL-SW01B-080514	8/5/14	0936	SW	AQ	3		x	
EL-SW01C-080514	8/5/14	0939	SW	AQ	3		x	
EL-SW01D-080514	8/5/14	0941	SW	AQ	3		x	
TB-080514	--	--	TB	AQ	3		x	

Page 1632 of 1636

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

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

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

Special Instructions/QC Requirements & Comments: DISSOLVED METALS FILTERED IN FIELD

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/5/14 1600		TK Canton	8/6/14 9:20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 40408

Client Tetra Tech Site Name MSt Surface

Cooler unpacked by: [signature]

Cooler Received on 8-6-14 Opened on 8-6-14

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

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

IR GUN# A	(CF +2 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4	(CF -2 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☒ See Multiple Cooler Form
IR GUN# 5	(CF 0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF 0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 (1 each) Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? 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. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC412469
11. Were VOAs on the COC? Yes ~~No~~ 8-6-14
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? 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): _____.

MTMSCCBDILH20-157 Tune Solution Spex CL10-92YPY_____

TestAmerica ICP/MS Data Review Checklist

Run Date: 8-12-14 **Analyst:** RKT **Instrument:** I10

Review Items

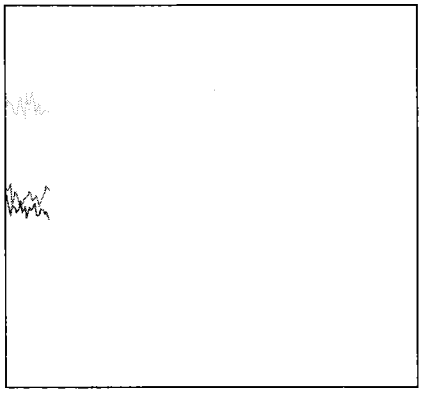
A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV*: =90 – 110%) (*CCV*: 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

Level I Analyst: Natalie J Toth Date: 8-12-14 Time: Job 280-58471 only
Level I Analyst: Frank K Toth Date: 8-13-14 Time: 11:28 ~~12:39~~ 22:53 RKT 8-13-14
Level II Reviewer: Frank K Toth Date: 8-12-14 Time: Job 280-58471 only
Level II Reviewer: Natalie J Toth Date: 8-13-14 Time: 11:28-22:53

Comments:_____

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2586	2497.9	3.65
89	10000	7225	7355.7	2.67
205	10000	4371	4640.5	3.29
156/140	1	0.423 %	0.476 %	23.03
70/140	5	3.837 %	4.160 %	8.43
115	1000	552	518.9	7.22
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.50	L/min	S/C Temp	2	°C
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	0.60	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	9.0	V	Deflect	15.2	V
Extract 2	-180.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-80	V	Cell Exit	-50	V			

Cell Parameters

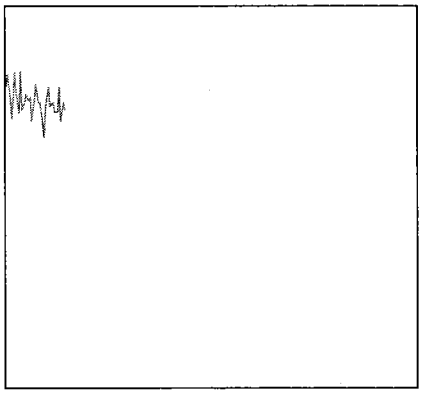
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

IF/BK Press	2.25E+2	Pa	MU./Dil. Gas	0.60	L/min	He Gas	0.00	mL/min
Analyzer Press	1.13E-4	Pa	Carrier Gas	0.50	L/min			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1457	1501.1	5.47
51	200	83	97.7	14.52
52	200	130	96.8	14.46
51/59	10	5.698 %	6.535 %	16.51
52/59	10	8.925 %	6.477 %	16.06
45	200	96	100.1	10.65
115	500	174	161.8	9.98
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.50	L/min	S/C Temp	2	°C
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	0.60	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	9.0	V	Deflect	3.0	V
Extract 2	-180.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-80	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.26E+2	Pa	MU./Dil. Gas	0.60	L/min	He Gas	4.00	mL/min
Analyzer Press	1.88E-4	Pa	Carrier Gas	0.50	L/min			

US EPA Tune Check Sample Report

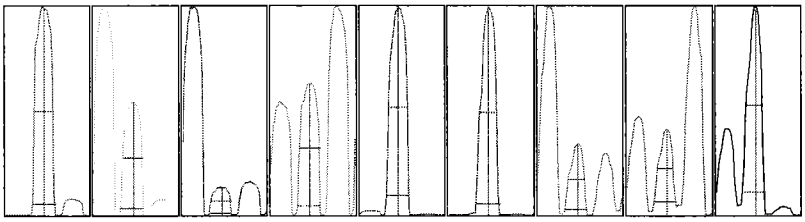
Batch Folder D:\Analytical Runs\I10081214A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	44461	0.62	5.00	
24	148076	0.64	5.00	
25	20106	0.63	5.00	
26	23938	1.04	5.00	
59	263490	0.36	5.00	
115	387211	0.16	5.00	
206	92679	0.75	5.00	
207	83565	0.65	5.00	
208	187882	0.56	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	44770	44687	44413	44361	44076
24	149244	147168	147924	148841	147201
25	20253	19962	20052	20039	20226
26	24204	24203	23835	23691	23757
59	263294	262576	262831	265011	263738
115	386350	387116	387570	387024	387995
206	91648	92473	92972	93527	92775
207	83090	83711	82940	84231	83852
208	186673	187597	189220	188676	187244

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6951	8.95	8.9 - 9.1		0.797	0.850	
24	23129	23.95	23.9 - 24.1		0.790	0.850	
25	3093	24.95	24.9 - 25.1		0.791	0.850	
26	3639	25.90	25.9 - 26.1		0.792	0.850	
59	42081	58.90	58.9 - 59.1		0.792	0.850	
115	67529	114.95	114.9 - 115.1		0.803	0.850	
206	16301	205.95	205.9 - 206.1		0.775	0.850	
207	14247	206.95	206.9 - 207.1		0.763	0.850	
208	34606	207.95	207.9 - 208.1		0.780	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	0.50	L/min	S/C Temp	2	°C
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	0.60	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.0	V	Deflect	15.2	V
Extract 2	-180.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-80	V	Cell Exit	-50	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	4.0	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			

MTMSCCBDILH20-157 Tune Solution Spex CL10-92YPY_____

TestAmerica ICP/MS Data Review Checklist

Run Date: 8-13-14 Analyst: RLT Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient ≥ 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

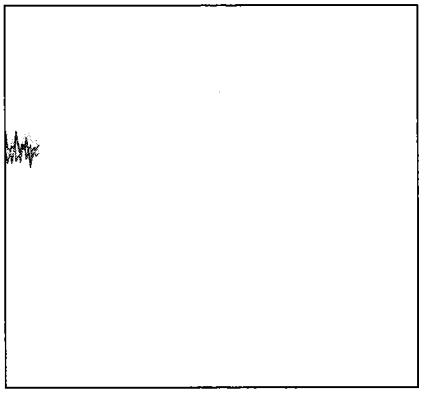
Level I Analyst: Roger Jones Date: 8-14-14 Time: 15:14 → 21:22
Level I Analyst:_____ Date:_____ Time:_____

Level II Reviewer: Natalie J Tolen Date: 8-14-14 Time: 15:14 – 21:22
Level II Reviewer:_____ Date:_____ Time:_____

Comments:_____

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	3068	3057.7	3.02
89	10000	6141	6397.0	3.23
205	5000	3188	3141.3	3.43
156/140	1	0.381 %	0.365 %	28.03
70/140	5	3.240 %	3.195 %	12.39
115	200	88	97.1	10.96
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.50	L/min	S/C Temp	2	°C
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	0.60	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

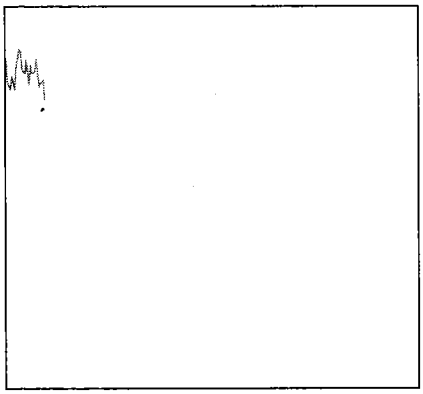
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

IF/BK Press	2.31E+2	Pa	MU./Dil. Gas	0.60	L/min	He Gas	0.00	mL/min
Analyzer Press	1.33E-4	Pa	Carrier Gas	0.50	L/min			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1521	1654.3	4.35
51	200	129	128.8	10.79
52	200	118	101.1	11.88
51/59	10	8.484 %	7.790 %	10.50
52/59	10	7.760 %	6.118 %	12.43
45	50	32	36.1	20.33
115	100	29	35.0	18.47
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.50	L/min	S/C Temp	2	°C
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	0.60	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.32E+2	Pa	MU./Dil. Gas	0.60	L/min	He Gas	3.99	mL/min
Analyzer Press	1.89E-4	Pa	Carrier Gas	0.50	L/min			

US EPA Tune Check Sample Report

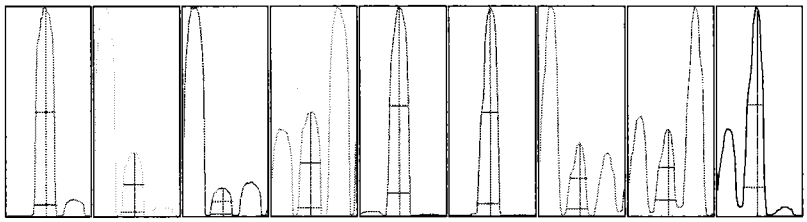
Batch Folder D:\Analytical Runs\I10081314B.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	54042	1.19	5.00	
24	167818	0.54	5.00	
25	22606	0.54	5.00	
26	27475	1.47	5.00	
59	270424	0.50	5.00	
115	314300	0.53	5.00	
206	61670	0.79	5.00	
207	56307	0.82	5.00	
208	124052	0.24	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	54812	54595	53612	53305	53883
24	169131	168363	167485	167079	167033
25	22772	22640	22648	22489	22481
26	27382	28068	27636	27297	26993
59	271825	270877	271066	270099	268252
115	315598	316044	314575	313239	312043
206	61894	62379	61548	61103	61426
207	56626	56434	56308	55520	56646
208	124461	123911	123849	123766	124274

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	8443	8.95	8.9 - 9.1		0.791	0.850	
24	26136	23.95	23.9 - 24.1		0.790	0.850	
25	3463	24.95	24.9 - 25.1		0.791	0.850	
26	4171	25.90	25.9 - 26.1		0.792	0.850	
59	43181	58.90	58.9 - 59.1		0.796	0.850	
115	55833	114.95	114.9 - 115.1		0.781	0.850	
206	11203	205.95	205.9 - 206.1		0.749	0.850	
207	9734	206.95	206.9 - 207.1		0.720	0.850	
208	23508	207.95	207.9 - 208.1		0.739	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	0.50	L/min	S/C Temp	2	°C
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	0.60	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	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	4.0	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			

MTMSCCBDILH20-154 Tune Solution Spex Lot CL10-92YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 8-14-14 Analyst: NJT Instrument: I11

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
2. Performance check within recommended specifications? (Be>8000cps) (In >300,000 cps) (Pb >100,000 cps) (Co>100,000) (Mg>10,000) (CeO/Ce<0.03) (Ba++/Ba<0.05) (Background < 5cps @ Mass 220) CCT Performance Check (In > 75,000) (Se< 20 cps)	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
1. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
2. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
3. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
4. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

Level I Analyst: Natalie J Jotn Date: 8-15-14 Time: 12:04-03:20
Level I Analyst: _____ Date: _____ Time: _____

Level II Reviewer: Ryan K. Jott Date: 8-15-14 Time: 12:04-03:20
Level II Reviewer: _____ Date: _____ Time: _____

Comments: _____

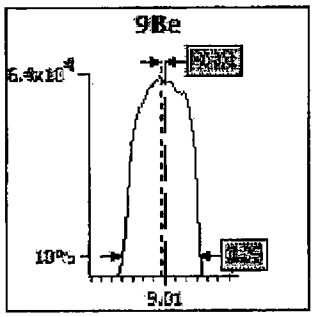
N:/Metals/ICPMS /ICPMS Data Review Checklist
Revised 4-30-14

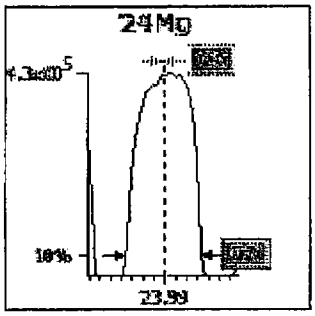
Performance Report

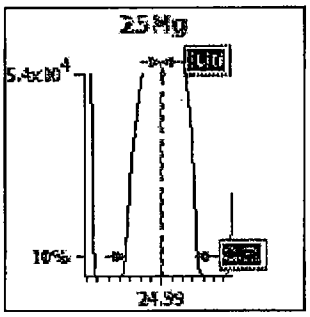
Sample details
Acquired at : 8/14/2014 11:47:31
Report name : STD MODE PERF REPORT [4/1/2014 13:53:56]

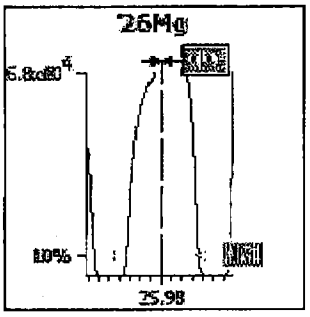
Mass Calibration verification

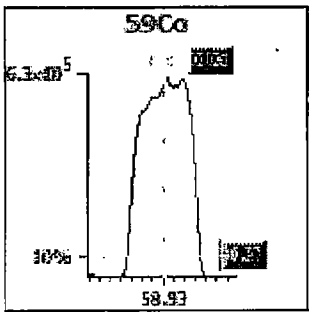
Acquisition parameters
Sweeps : 10
Dwell : 3.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 10% of the peak maximum

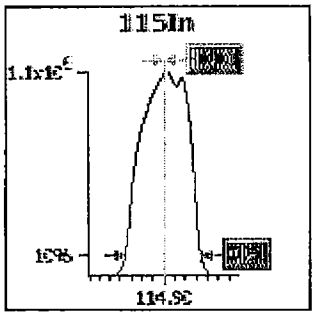


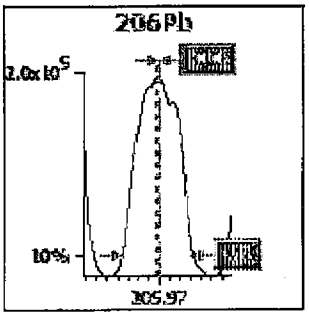


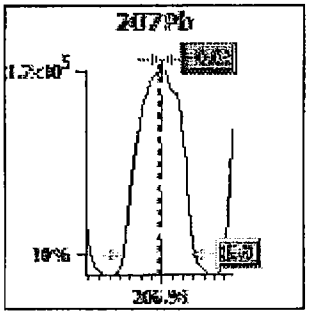


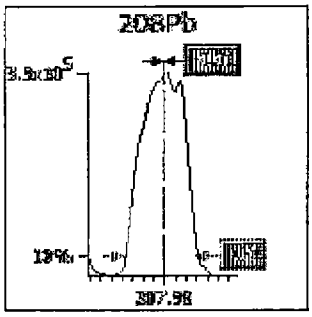












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.10	0.73	-0.03
24Mg	0.85	0.65	0.10	0.71	0.01
25Mg	0.85	0.65	0.10	0.71	0.01
26Mg	0.85	0.65	0.10	0.71	0.01
59Co	0.85	0.65	0.10	0.71	0.01
115In	0.85	0.65	0.10	0.71	-0.01
206Pb	0.85	0.65	0.10	0.69	-0.03
207Pb	0.85	0.65	0.10	0.71	-0.03
208Pb	0.85	0.65	0.10	0.71	-0.01

Sample details
Acquired at : 8/14/2014 11:47:31
Report name : STD MODE PERF REPORT [4/1/2014 13:53:56]

Tune conditions

Major	
Extraction	-109.8
Lens 1	-1184
Lens 2	-80.0
Focus	11.0
D1	-47.1
D2	-140
Pole Bias	0.0
Hexapole Bias	-4.0
Nebuliser	0.81

Minor	
Lens 3	-198.4
Forward power	1404
Horizontal	24
Vertical	282
DA	-46.3
Cool	13.0
Auxiliary	0.90
Sampling Depth	150

Global	
Standard resolution	115
High resolution	115
Analogue Detector	1825
PC Detector	2775

Add Gases	
CCT-He	0.00
CCT-He Not Used	0.00
AGC1-N2 Not Used	0

Sensitivity and stability results

Acquisition parameters
Sweeps : 50

Run	Time	6Bkg	9Be	24Mg	25Mg	26Mg	59Co	137Ba++	101Bkg	115In
	Dwell (mSec(s))	100.0	100.0	10.0	30.0	30.0	10.0	30.0	100.0	10.0
Limits	%RSD	-	5.0%		5.0%		5.0%	-	-	5.0%
	Countrate	-	>8000	>10000	>10000	>10000	>100000	-	-	>3000000
1	11:47:57	0.200	60846.757	406918.25	56005.997	68367.354	612863.06	3727.611	0.600	985348.97
2	11:48:34	0.000	60622.413	423446.69	58406.146	66394.715	630774.39	3860.298	0.200	982670.58
3	11:49:12	0.000	59912.905	414676.85	56946.785	66758.348	612608.95	3725.611	0.200	999211.23
4	11:49:50	0.200	59033.417	409865.82	56895.335	66172.126	611143.73	3710.275	0.600	996712.38
5	11:50:27	0.200	60024.372	406829.49	56706.239	67803.823	607711.57	3733.612	0.400	985276.19
X		0.120	60087.973	412347.42	56992.100	67099.273	615020.34	3751.482	0.400	989843.87
σ		0.11	708.55	6976.78	875.37	945.60	9043.02	61.44	0.20	7540.69
%RSD		91.287	1.179	1.692	1.536	1.409	1.470	1.638	50.000	0.762

Run	Time	137Ba	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg	238U
	Dwell (mSec(s))	10.0	10.0	30.0	10.0	10.0	10.0	100.0	10.0
Limits	%RSD	-	-	-	-	-	5.0%	-	-
	Countrate	-	-	-	>100000	>100000	>100000	<5	-
1	11:47:57	105713.03	897804.70	24835.663	193987.72	168246.24	412613.12	0.000	692150.62
2	11:48:34	108249.85	892551.53	26066.916	201617.73	175679.10	414355.59	0.200	692483.66
3	11:49:12	110634.26	906089.71	27527.147	192969.88	174919.81	426562.32	0.000	688641.69
4	11:49:50	111441.83	901993.51	26037.552	199589.55	178519.11	425614.37	0.200	687858.57
5	11:50:27	105271.17	868699.02	25961.473	194330.36	170151.06	404187.14	0.000	694037.88
X		108262.03	893427.69	26085.750	196499.05	173503.06	416666.51	0.080	691034.49
σ		2792.01	14706.57	956.36	3847.63	4206.34	9427.30	0.11	2654.15
%RSD		2.579	1.646	3.666	1.958	2.424	2.263	136.931	0.384

Ratio results

Run	Time	137Ba++/137Ba	156CeO/140Ce
	Ratio limits	<0.0500	<0.0300
1	11:47:57	0.035	0.028
2	11:48:34	0.036	0.029
3	11:49:12	0.034	0.030
4	11:49:50	0.033	0.029
5	11:50:27	0.035	0.030
X		0.0347	0.0292
σ		0.00	0.00
%RSD		3.1765	3.5661

Result : The performance report passed.

Performance Report

Sample details
Acquired at : 8/14/2014 11:56:20
Report name : CCT MODE PERF REPORT [4/1/2014 13:53:31]

Tune conditions

Major	
Extraction	-109.8
Lens 1	-1184
Lens 2	-80.0
Focus	-6.1
D1	-59.6
D2	-140
Pole Bias	-14.0
Hexapole Bias	-17.0
Nebuliser	0.81

Minor	
Lens 3	-198.4
Forward power	1404
Horizontal	24
Vertical	282
DA	-46.3
Cool	13.0
Auxiliary	0.90
Sampling Depth	150

Global	
Standard resolution	115
High resolution	115
Analogue Detector	1825
PC Detector	2775

Add. Gases	
CCT-He	4.47
CCT-He Not Used	0.00
AGC1-N2 Not Used	0

Sensitivity and stability results

Acquisition parameters
Sweeps : 100

Run	Time	78Ar2	115In	140Ce	156Ce O
	Dwell (mSecs)	100.0	10.0	10.0	10.0
Limits	%RSD	-	5.0%	-	-
	Countrate	<20	>75000	-	-
1	11:56:21	9.300	195631.45	342557.95	4154.345
2	11:56:38	8.700	195151.72	341228.96	4243.360
3	11:56:54	10.000	192195.96	335694.79	4052.328
4	11:57:10	8.200	197779.25	344010.69	4018.323
5	11:57:27	8.400	190895.05	338454.63	4196.352
x		8.920	194330.69	340389.40	4132.942
σ		0.73	2766.74	3328.06	95.27
%RSD		8.215	1.424	0.978	2.305

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0300
1	11:56:21	0.012
2	11:56:38	0.012
3	11:56:54	0.012
4	11:57:10	0.012
5	11:57:27	0.012
x		0.0121
σ		0.00
%RSD		2.5042

Result : The performance report passed.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICV Source: MTMSICVW_00036 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00097

Analyte	ICV 240-142496/7 08/12/2014 11:49				CCV 240-142496/71 08/12/2014 15:51				CCV 240-142496/83 08/12/2014 16:38			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	39.4		40.0	98	51.6		50.0	103	50.4		50.0	101
Arsenic	38.7		40.0	97	48.4		50.0	97	49.1		50.0	98
Barium	40.8		40.0	102	50.5		50.0	101	49.8		50.0	100
Beryllium	40.4		40.0	101	47.9		50.0	96	51.6		50.0	103
Cadmium	41.2		40.0	103	50.1		50.0	100	49.5		50.0	99
Calcium	19800		20000	99	24700		25000	99	24400		25000	98
Chromium	42.0		40.0	105	51.3		50.0	103	50.2		50.0	100
Cobalt	40.9		40.0	102	52.2		50.0	104	51.0		50.0	102
Copper	41.3		40.0	103	51.8		50.0	104	51.4		50.0	103
Lead	43.6		40.0	109	54.1		50.0	108	52.4		50.0	105
Magnesium	20300		20000	101	25000		25000	100	24500		25000	98
Molybdenum	40.7		40.0	102	50.1		50.0	100	49.1		50.0	98
Nickel	42.1		40.0	105	52.2		50.0	104	51.3		50.0	103
Selenium	40.8		40.0	102	47.8		50.0	96	47.8		50.0	96
Silver	43.1		40.0	108	52.2		50.0	104	51.2		50.0	102
Thallium	44.0		40.0	110	51.0		50.0	102	50.6		50.0	101
Tungsten	40.9		40.0	102	52.0		50.0	104	51.4		50.0	103
Vanadium	41.8		40.0	105	51.7		50.0	103	50.0		50.0	100
Zinc	42.4		40.0	106	54.0		50.0	108	51.8		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.: 240-40408-1

SDG No.:

ICV Source: MTMSICVW_00036 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00097

Analyte	CCV 240-142496/95 08/12/2014 17:22				CCV 240-142496/107 08/12/2014 18:06				CCV 240-142496/119 08/12/2014 18:49			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	49.0		50.0	98	48.6		50.0	97	51.7		50.0	103
Arsenic	48.6		50.0	97	48.4		50.0	97	51.0		50.0	102
Barium	48.1		50.0	96	47.7		50.0	95	50.4		50.0	101
Beryllium	49.1		50.0	98	49.8		50.0	100	52.2		50.0	104
Cadmium	48.3		50.0	97	47.9		50.0	96	50.6		50.0	101
Calcium	23100		25000	93	23500		25000	94	25300		25000	101
Chromium	46.1		50.0	92	46.7		50.0	93	49.6		50.0	99
Cobalt	46.8		50.0	94	47.2		50.0	94	50.4		50.0	101
Copper	47.0		50.0	94	46.8		50.0	94	50.0		50.0	100
Lead	49.2		50.0	98	49.7		50.0	99	52.6		50.0	105
Magnesium	22500		25000	90	22800		25000	91	24700		25000	99
Molybdenum	47.7		50.0	95	48.4		50.0	97	51.5		50.0	103
Nickel	46.6		50.0	93	47.1		50.0	94	50.5		50.0	101
Selenium	47.6		50.0	95	47.9		50.0	96	49.9		50.0	100
Silver	49.0		50.0	98	50.3		50.0	101	53.2		50.0	106
Thallium	47.2		50.0	94	48.2		50.0	96	51.9		50.0	104
Tungsten	48.6		50.0	97	48.2		50.0	96	51.6		50.0	103
Vanadium	46.5		50.0	93	47.2		50.0	94	50.4		50.0	101
Zinc	47.4		50.0	95	47.7		50.0	95	50.8		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.: 240-40408-1

SDG No.:

ICV Source: MTMSICVW_00036 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00097

Analyte	ICV 240-142777/7 08/13/2014 15:36				CCV 240-142777/40 08/13/2014 17:34				CCV 240-142777/52 08/13/2014 18:17			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	41.2		40.0	103	51.5		50.0	103	50.4		50.0	101
Arsenic	39.2		40.0	98	48.6		50.0	97	47.8		50.0	96
Barium	41.9		40.0	105	48.5		50.0	97	48.6		50.0	97
Beryllium	39.4		40.0	99	48.2		50.0	96	50.0		50.0	100
Cadmium	41.3		40.0	103	49.2		50.0	98	48.4		50.0	97
Calcium	20400		20000	102	24400		25000	98	24800		25000	99
Chromium	42.0		40.0	105	49.4		50.0	99	49.9		50.0	100
Cobalt	40.0		40.0	100	47.9		50.0	96	48.4		50.0	97
Copper	42.3		40.0	106	49.4		50.0	99	49.8		50.0	100
Lead	40.6		40.0	101	48.2		50.0	96	48.4		50.0	97
Magnesium	20200		20000	101	24900		25000	99	24600		25000	99
Molybdenum	41.5		40.0	104	50.3		50.0	101	50.6		50.0	101
Nickel	40.8		40.0	102	48.2		50.0	96	48.1		50.0	96
Selenium	40.4		40.0	101	47.1		50.0	94	46.6		50.0	93
Silver	40.9		40.0	102	48.7		50.0	97	48.6		50.0	97
Thallium	38.9		40.0	97	45.8		50.0	92	45.8		50.0	92
Tungsten	40.8		40.0	102	49.9		50.0	100	49.9		50.0	100
Vanadium	41.8		40.0	105	49.1		50.0	98	49.9		50.0	100
Zinc	41.0		40.0	103	48.4		50.0	97	49.0		50.0	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.: 240-40408-1

SDG No.:

ICV Source: MTMSICVW_00036 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00097

Analyte	CCV 240-142777/64 08/13/2014 19:00											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.4		50.0	103								
Arsenic	48.5		50.0	97								
Barium	49.1		50.0	98								
Beryllium	50.3		50.0	101								
Cadmium	49.1		50.0	98								
Calcium	24900		25000	100								
Chromium	49.7		50.0	99								
Cobalt	48.3		50.0	97								
Copper	49.4		50.0	99								
Lead	49.3		50.0	99								
Magnesium	24600		25000	98								
Molybdenum	51.4		50.0	103								
Nickel	48.9		50.0	98								
Selenium	48.1		50.0	96								
Silver	49.3		50.0	99								
Thallium	46.4		50.0	93								
Tungsten	50.2		50.0	100								
Vanadium	50.0		50.0	100								
Zinc	48.9		50.0	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.: 240-40408-1

SDG No.:

ICV Source: MTMSICVW_00036 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00097

Analyte	ICV 240-142921/5 08/14/2014 12:32				CCV 240-142921/47 08/14/2014 17:31				CCV 240-142921/56 08/14/2014 18:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	41.6		40.0	104	52.5		50.0	105	52.9		50.0	106
Arsenic	39.1		40.0	98	49.5		50.0	99	49.5		50.0	99
Barium	40.3		40.0	101	48.8		50.0	98	49.2		50.0	98
Beryllium	41.7		40.0	104	47.0		50.0	94	45.1		50.0	90
Cadmium	41.7		40.0	104	52.1		50.0	104	52.6		50.0	105
Chromium	41.3		40.0	103	52.1		50.0	104	50.1		50.0	100
Cobalt	40.4		40.0	101	51.5		50.0	103	49.8		50.0	100
Copper	41.7		40.0	104	50.7		50.0	101	49.4		50.0	99
Lead	41.6		40.0	104	53.2		50.0	106	53.1		50.0	106
Molybdenum	41.8		40.0	104	52.0		50.0	104	50.8		50.0	102
Nickel	40.7		40.0	102	50.5		50.0	101	48.8		50.0	98
Selenium	40.8		40.0	102	49.7		50.0	99	49.9		50.0	100
Silver	43.7		40.0	109	52.0		50.0	104	52.1		50.0	104
Thallium	41.6		40.0	104	53.8		50.0	108	53.3		50.0	107
Tungsten	39.3		40.0	98	52.7		50.0	105	51.4		50.0	103
Vanadium	40.4		40.0	101	51.0		50.0	102	48.8		50.0	98
Zinc	39.8		40.0	99	49.9		50.0	100	49.4		50.0	99
Calcium	18700		20000	94	24300		25000	97	24200		25000	97
Magnesium	20100		20000	101	26500		25000	106	26100		25000	105

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.: 240-40408-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-142496/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00013

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.04		102	50-150
Arsenic	5.00	4.92	J	98	50-150
Barium	5.00	5.06		101	50-150
Beryllium	1.00	1.01		101	50-150
Cadmium	1.00	0.992	J	99	50-150
Chromium	2.00	1.92	J	96	50-150
Cobalt	1.00	0.995	J	100	50-150
Copper	2.00	2.08		104	50-150
Lead	1.00	1.08		108	50-150
Molybdenum	10.0	9.70	J	97	50-150
Nickel	2.00	2.00		100	50-150
Selenium	5.00	4.95	J	99	50-150
Silver	1.00	1.06		106	50-150
Thallium	2.00	2.15		108	50-150
Vanadium	5.00	4.91	J	98	50-150
Zinc	20.0	20.5		102	50-150
Calcium	1000	939	J	94	50-150
Magnesium	1000	1000		100	50-150
Tungsten	10.0	9.98	J	100	50-150

Lab Sample ID: CRI 240-142777/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00013

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.06		103	50-150
Arsenic	5.00	4.84	J	97	50-150
Barium	5.00	4.85	J	97	50-150
Beryllium	1.00	0.851	J	85	50-150
Cadmium	1.00	1.01		101	50-150
Chromium	2.00	1.95	J	97	50-150
Cobalt	1.00	0.967	J	97	50-150
Copper	2.00	2.03		101	50-150
Lead	1.00	1.03		103	50-150
Molybdenum	10.0	9.85	J	98	50-150
Nickel	2.00	1.96	J	98	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.: 240-40408-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-142777/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00013

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	4.82	J	96	50-150
Silver	1.00	1.02		102	50-150
Thallium	2.00	1.89	J	94	50-150
Vanadium	5.00	4.86	J	97	50-150
Zinc	20.0	18.3	J	91	50-150
Calcium	1000	936	J	94	50-150
Magnesium	1000	1020		102	50-150
Tungsten	10.0	9.80	J	98	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.: 240-40408-1

SDG No.:

Method: 6020 Instrument ID: I11

Lab Sample ID: CRI 240-142921/7 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00013

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.06		103	50-150
Arsenic	5.00	4.96	J	99	50-150
Barium	5.00	4.95	J	99	50-150
Beryllium	1.00	0.976	J	98	50-150
Cadmium	1.00	1.04		104	50-150
Chromium	2.00	2.00		100	50-150
Cobalt	1.00	1.05		105	50-150
Copper	2.00	2.02		101	50-150
Lead	1.00	1.08		108	50-150
Molybdenum	10.0	9.99	J	100	50-150
Nickel	2.00	2.11		106	50-150
Selenium	5.00	4.82	J	96	50-150
Silver	1.00	1.15		115	50-150
Thallium	2.00	2.31		115	50-150
Vanadium	5.00	5.03		101	50-150
Zinc	20.0	19.2	J	96	50-150
Calcium	1000	939	J	94	50-150
Magnesium	1000	1020		102	50-150
Tungsten	10.0	10.0		100	50-150

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

FORM IIB-IN

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICV Source: MTHgStd_00010 Concentration Units: ug/L

CCV Source: MTHGCALW_00697

Analyte	ICV 240-142328/7-A 08/11/2014 12:53				CCVL 240-142328/10-A 08/11/2014 12:58				CCV 240-142328/11-A 08/11/2014 15:01			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.47		2.50	99	5.10		5.00	102	4.86		5.00	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICV Source: MTHgStd_00010 Concentration Units: ug/L

CCV Source: MTHGCALW_00697

Analyte	CCV 240-142328/11-A 08/11/2014 15:23				CCV 240-142328/11-A 08/11/2014 15:45				CCV 240-142328/11-A 08/11/2014 15:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.90		5.00	98	4.75		5.00	95	4.85		5.00	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICV Source: MTHgStd_00010 Concentration Units: ug/L

CCV Source: MTHGCALW_00697

Analyte	ICV 240-142328/7-A 08/12/2014 10:02				CCVL 240-142328/10-A 08/12/2014 11:18				CCV 240-142328/11-A 08/12/2014 12:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.48		2.50	99	4.93		5.00	99	4.86		5.00	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICV Source: MTHgStd_00010 Concentration Units: ug/L

CCV Source: MTHGCALW_00697

Analyte	CCV 240-142328/11-A 08/12/2014 12:43				CCV 240-142328/11-A 08/12/2014 13:05				CCV 240-142328/11-A 08/12/2014 13:28			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.86		5.00	97	4.78		5.00	96	4.67		5.00	93

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.: 240-40408-1

SDG No.:

ICV Source: MTHgStd_00010 Concentration Units: ug/L

CCV Source: MTHGCALW_00697

Analyte	CCV 240-142328/11-A 08/12/2014 13:50				CCV 240-142328/11-A 08/12/2014 14:30				CCV 240-142328/11-A 08/12/2014 14:54			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.67		5.00	93	6.01		5.00	120	5.90		5.00	118

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.: 240-40408-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-142328/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00697

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.152	J	76	50-150

Lab Sample ID: CRA 240-142328/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00697

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.20	U	59	50-150

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

FORM IIB-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142080/1-A

Instrument Code: I10 Batch No.: 142496

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	0.189	J		6020
7440-39-3	Barium	0.876	J		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
7439-92-1	Lead	0.210	J		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	0.125	J		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	1.0	U		6020
7440-28-0	Thallium	2.0	U		6020
7440-62-2	Vanadium	5.0	U		6020
7440-66-6	Zinc	6.78	J		6020
7440-70-2	Calcium	150	J		6020
7439-95-4	Magnesium	49.9	J		6020
7440-33-7	Tungsten	0.259	J		6020

FORM III-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142080/1-A

Instrument Code: I10 Batch No.: 142777

CAS No.	Analyte	Concentration	C	Q	Method
7440-50-8	Copper	1.46	J		6020

FORM III-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142276/1-A

Instrument Code: I10 Batch No.: 142496

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	0.555	J		6020
7440-38-2	Arsenic	0.109	J		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	0.158	J		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	3.79			6020
7439-92-1	Lead	0.809	J		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	2.0	U		6020
7440-62-2	Vanadium	5.0	U		6020
7440-66-6	Zinc	5.14	J		6020
7440-70-2	Calcium	1000	U		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	0.0510	J		6020

FORM III-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-142496/8 08/12/2014 11:53		CCB 240-142496/72 08/12/2014 15:54		CCB 240-142496/84 08/12/2014 16:42		CCB 240-142496/96 08/12/2014 17:26	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.228	J	0.690	J	0.238	J	0.147	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	1.0	U	0.0960	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	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	0.953	J	1.57	J	1.58	J
Lead	1.0	1.0	U	0.324	J	0.191	J	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	5.0	U	0.500	J	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Tungsten	10	0.163	J	0.157	J	0.409	J	0.409	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.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-142496/108 08/12/2014 18:09		CCB 240-142496/120 08/12/2014 18:53					
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.111	J	2.0	U				
Arsenic	5.0	5.0	U	5.0	U				
Barium	5.0	5.0	U	5.0	U				
Beryllium	1.0	0.0650	J	0.0440	J				
Cadmium	1.0	1.0	U	1.0	U				
Calcium	1000	1000	U	1000	U				
Chromium	2.0	2.0	U	2.0	U				
Cobalt	1.0	1.0	U	1.0	U				
Copper	2.0	< 1.02	J	< 1.03	J				
Lead	1.0	1.0	U	1.0	U				
Magnesium	1000	1000	U	1000	U				
Molybdenum	10	10	U	10	U				
Nickel	2.0	2.0	U	2.0	U				
Selenium	5.0	5.0	U	0.457	J				
Silver	1.0	1.0	U	1.0	U				
Thallium	2.0	2.0	U	2.0	U				
Tungsten	10	0.198	J	0.279	J				
Vanadium	5.0	5.0	U	5.0	U				
Zinc	20	20	U	20	U				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142287/1-A

Instrument Code: I10 Batch No.: 142777

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	0.501	J		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	2.0	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	0.576	J		6020

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-142777/8 08/13/2014 15:40		CCB 240-142777/41 08/13/2014 17:38		CCB 240-142777/53 08/13/2014 18:21		CCB 240-142777/65 08/13/2014 19:04	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.131	J	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	0.0430	J	0.0590	J	1.0	U
Cadmium	1.0	1.0	U	1.0	U	0.0400	J	1.0	U
Calcium	1000	55.5	J	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	0.0200	J	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	10	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	0.0100	J	0.0100	J	1.0	U
Thallium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Tungsten	10	0.134	J	0.144	J	0.266	J	0.319	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.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-142921/6 08/14/2014 12:39		CCB 240-142921/48 08/14/2014 17:38		CCB 240-142921/57 08/14/2014 18:41			
		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	0.0770	J		
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	0.0470	J		
Chromium	2.0	2.0	U	2.0	U	2.0	U		
Cobalt	1.0	1.0	U	0.0280	J	0.0450	J		
Copper	2.0	2.0	U	2.0	U	2.0	U		
Lead	1.0	1.0	U	1.0	U	1.0	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	0.0160	J	0.0360	J		
Thallium	2.0	2.0	U	0.669	J	0.408	J		
Tungsten	10	0.256	J	0.198	J	0.191	J		
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		
Magnesium	1000	1000	U	1000	U	25.8	J		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142088/1-A

Instrument Code: H1 Batch No.: 142327

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142277/1-A

Instrument Code: H1 Batch No.: 142536

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.: 240-40408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-142288/1-A

Instrument Code: H1 Batch No.: 142536

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-142328/8-A 08/11/2014 12:55		CCB 240-142328/12-A 08/11/2014 15:03		CCB 240-142328/12-A 08/11/2014 15:26		CCB 240-142328/12-A 08/11/2014 15:47	
		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.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-142328/12-A 08/11/2014 15:59							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-142328/8-A 08/12/2014 10:03		CCB 240-142328/12-A 08/12/2014 12:23		CCB 240-142328/12-A 08/12/2014 12:45		CCB 240-142328/12-A 08/12/2014 13:07	
		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.: 240-40408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-142328/12-A 08/12/2014 13:30		CCB 240-142328/12-A 08/12/2014 13:51		CCB 240-142328/12-A 08/12/2014 14:31		CCB 240-142328/12-A 08/12/2014 14:55	
		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.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: ICSA 240-142496/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00038

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0560**	
Arsenic		**0.0660**	
Barium		**0.0360**	
Beryllium		**0.0160**	
Cadmium		**0.0290**	
Calcium	**50000**	**48682**	**97**
Chromium		**0.620**	
Cobalt		**0.0050**	
Copper		**0.326**	
Lead		**0.197**	
Magnesium	**50000**	**49008**	**98**
Molybdenum	**1000**	**984**	**98**
Nickel		**0.0630**	
Selenium		**0.0810**	
Silver		**0.0110**	
Thallium		**0.0050**	
Tungsten		**0.126**	
Vanadium		**0.0040**	
Zinc		**0.598**	
Aluminum	*50000*	*49668*	*99*
Boron		*-0.838*	
Iron	*50000*	*49961*	*100*
Manganese		*0.230*	
Potassium	*50000*	*48754*	*98*
Sodium	*50000*	*48765*	*98*
Strontium		*0.121*	
Tin		*0.0840*	
Titanium	*1000*	*996*	*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.: 240-40408-1

SDG No.:

Lab Sample ID: ICSAB 240-142496/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00037

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**104**	**104**
Arsenic	**100**	**100**	**100**
Barium	**100**	**104**	**104**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**102**	**102**
Calcium	**50000**	**49791**	**100**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**101**	**101**
Copper	**100**	**97.8**	**98**
Lead	**100**	**102**	**102**
Magnesium	**50000**	**48545**	**97**
Molybdenum	**1100**	**1091**	**99**
Nickel	**100**	**101**	**101**
Selenium	**100**	**100**	**100**
Silver	**100**	**99.6**	**100**
Thallium	**100**	**101**	**101**
Tungsten	**100**	**103**	**103**
Vanadium	**100**	**99.3**	**99**
Zinc	**100**	**103**	**103**
Aluminum	*50000*	*49134*	*98*
Boron	*100*	*108*	*108*
Iron	*50000*	*49916*	*100*
Manganese	*100*	*100*	*100*
Potassium	*50000*	*48430*	*97*
Sodium	*50000*	*48215*	*96*
Strontium	*100*	*101*	*101*
Tin	*100*	*98.0*	*98*
Titanium	*1100*	*1094*	*99*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: ICSA 240-142777/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00038

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.124**	
Arsenic		**0.0240**	
Barium		**0.0660**	
Beryllium		**0.0130**	
Cadmium		**0.0200**	
Calcium	**50000**	**49038**	**98**
Chromium		**0.683**	
Cobalt		**0.0050**	
Copper		**0.260**	
Lead		**0.194**	
Magnesium	**50000**	**49413**	**99**
Molybdenum	**1000**	**1057**	**106**
Nickel		**0.104**	
Selenium		**-0.0010**	
Silver		**0.0120**	
Thallium		**0.0050**	
Tungsten		**0.120**	
Vanadium		**-0.0190**	
Zinc		**-1.37**	
Aluminum	*50000*	*47491*	*95*
Boron		*1.04*	
Iron	*50000*	*49425*	*99*
Manganese		*0.120*	
Potassium	*50000*	*48807*	*98*
Sodium	*50000*	*49814*	*100*
Strontium		*0.289*	
Tin		*0.119*	
Titanium	*1000*	*984*	*98*

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.: 240-40408-1

SDG No.:

Lab Sample ID: ICSAB 240-142777/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00037

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**106**	**106**
Arsenic	**100**	**100**	**100**
Barium	**100**	**104**	**104**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**50791**	**102**
Chromium	**100**	**103**	**103**
Cobalt	**100**	**103**	**103**
Copper	**100**	**102**	**102**
Lead	**100**	**102**	**102**
Magnesium	**50000**	**50311**	**101**
Molybdenum	**1100**	**1179**	**107**
Nickel	**100**	**103**	**103**
Selenium	**100**	**99.8**	**100**
Silver	**100**	**102**	**102**
Thallium	**100**	**102**	**102**
Tungsten	**100**	**103**	**103**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**104**	**104**
Aluminum	*50000*	*48040*	*96*
Boron	*100*	*113*	*113*
Iron	*50000*	*51141*	*102*
Manganese	*100*	*102*	*102*
Potassium	*50000*	*50141*	*100*
Sodium	*50000*	*50819*	*102*
Strontium	*100*	*104*	*104*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1108*	*101*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Lab Sample ID: ICSA 240-142921/8 Instrument ID: I11

Lab File ID: I11081414A.csv ICS Source: MTMSICSAW_00038

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0560**	
Arsenic		**0.0140**	
Barium		**0.0570**	
Beryllium		**0.0040**	
Cadmium		**-0.219**	
Chromium		**0.724**	
Cobalt		**0.0280**	
Copper		**0.170**	
Lead		**0.197**	
Molybdenum	**1000**	**1041**	**104**
Nickel		**0.406**	
Selenium		**0.0560**	
Silver		**0.0120**	
Thallium		**0.138**	
Tungsten		**0.210**	
Vanadium		**-0.0410**	
Zinc		**-0.122**	
Aluminum	*50000*	*50160*	*100*
Boron		*-1.80*	
Calcium	*50000*	*47550*	*95*
Iron	*50000*	*51480*	*103*
Magnesium	*50000*	*52080*	*104*
Manganese		*0.256*	
Potassium	*50000*	*52010*	*104*
Sodium	*50000*	*51720*	*103*
Strontium		*0.152*	
Tin		*0.0840*	
Titanium	*1000*	*1077*	*108*

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.: 240-40408-1

SDG No.:

Lab Sample ID: ICSAB 240-142921/9 Instrument ID: I11

Lab File ID: I11081414A.csv ICS Source: MTMSICSABW_00037

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**104**	**104**
Arsenic	**100**	**103**	**103**
Barium	**100**	**101**	**101**
Beryllium	**100**	**97.4**	**97**
Cadmium	**100**	**101**	**101**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**103**	**103**
Copper	**100**	**102**	**102**
Lead	**100**	**105**	**105**
Molybdenum	**1100**	**1139**	**104**
Nickel	**100**	**102**	**102**
Selenium	**100**	**99.5**	**100**
Silver	**100**	**103**	**103**
Thallium	**100**	**107**	**107**
Tungsten	**100**	**106**	**106**
Vanadium	**100**	**102**	**102**
Zinc	**100**	**101**	**101**
Aluminum	*50000*	*49480*	*99*
Boron	*100*	*104*	*104*
Calcium	*50000*	*47970*	*96*
Iron	*50000*	*52400*	*105*
Magnesium	*50000*	*50830*	*102*
Manganese	*100*	*106*	*106*
Potassium	*50000*	*51350*	*103*
Sodium	*50000*	*51610*	*103*
Strontium	*100*	*101*	*101*
Tin	*100*	*98.0*	*98*
Titanium	*1100*	*1152*	*105*

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-SW38C-080514 MS
Lab ID: 240-40408-7 MS
Lab Name: TestAmerica Canton
Job No.: 240-40408-1
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	105		0.69	J	100	104	44-153		6020
Arsenic	1010		1.3	J	1000	101	82-123		6020
Barium	1080		18		1000	106	45-144		6020
Beryllium	1090		0.18	J	1000	109	77-124		6020
Cadmium	998		0.30	J	1000	100	78-117		6020
Chromium	995		0.37	J	1000	100	72-110		6020
Cobalt	1000		0.18	J	1000	100	67-114		6020
Copper	963		10		1000	95	60-123		6020
Lead	935		0.61	J	1000	93	73-115		6020
Molybdenum	104		1.6	J	100	102	80-110		6020
Nickel	1000		2.0		1000	100	72-111		6020
Selenium	940		0.80	J	1000	94	72-148		6020
Silver	100		0.010	J	100	100	10-139		6020
Thallium	236		2.0	U	250	94	69-117		6020
Vanadium	1030		0.66	J	1000	103	70-112		6020
Zinc	1010		9.9	J	1000	100	49-156		6020
Calcium	34500		24000		10000	102	70-130		6020
Magnesium	57000		48000		10000	86	70-130	4	6020
Tungsten	103		0.67	J	100	103	43-133		6020
Mercury	0.889		0.20	U	1.00	89	69-134		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 - DISSOLVED

Client ID: MSA-SW42C-080514 MS
Lab ID: 240-40408-23 MS
Lab Name: TestAmerica Canton
Job No.: 240-40408-1
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	110		0.25	J	100	110	44-153		6020
Arsenic	1130		1.3	J	1000	113	82-123		6020
Barium	1230		18		1000	121	45-144		6020
Beryllium	1010		0.064	J	1000	101	77-124		6020
Cadmium	1120		0.25	J	1000	112	78-117		6020
Chromium	1060		0.38	J	1000	106	72-110		6020
Cobalt	1040		0.14	J	1000	104	67-114		6020
Copper	1060		7.1		1000	106	60-123		6020
Lead	1050		0.38	J	1000	105	73-115		6020
Molybdenum	114		1.6	J	100	112	80-110	F1	6020
Nickel	1060		2.1		1000	106	72-111		6020
Selenium	1020		0.40	J	1000	102	72-148		6020
Silver	104		0.011	J	100	104	10-139		6020
Thallium	251		2.0	U	250	101	69-117		6020
Vanadium	1070		0.82	J	1000	107	70-112		6020
Zinc	1120		8.2	J	1000	111	49-156		6020
Calcium	37700		26000		10000	117	70-130		6020
Magnesium	61000		51000		10000	99	70-130	4	6020
Tungsten	107		0.86	J	100	106	43-133		6020
Mercury	0.873		0.20	U	1.00	87	69-134		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

Client ID: _____ Lab ID: 240-40409-B-1-C MS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

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	0.886		0.20	U	1.00	89	69-134		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-SW38C-080514 MSD
Lab ID: 240-40408-7 MSD
Lab Name: TestAmerica Canton
Job No.: 240-40408-1
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	109		100	108	44-153	4	20		6020
Arsenic	1030		1000	103	82-123	2	20		6020
Barium	1120		1000	110	45-144	4	20		6020
Beryllium	1120		1000	112	77-124	3	20		6020
Cadmium	1040		1000	104	78-117	4	20		6020
Chromium	1040		1000	104	72-110	5	20		6020
Cobalt	1040		1000	104	67-114	4	20		6020
Copper	1000		1000	99	60-123	4	20		6020
Lead	983		1000	98	73-115	5	20		6020
Molybdenum	109		100	107	80-110	5	20		6020
Nickel	1040		1000	104	72-111	4	20		6020
Selenium	978		1000	98	72-148	4	20		6020
Silver	104		100	104	10-139	4	20		6020
Thallium	246		250	98	69-117	4	20		6020
Vanadium	1070		1000	107	70-112	4	20		6020
Zinc	1070		1000	106	49-156	6	20		6020
Calcium	36500		10000	122	70-130	6	20		6020
Magnesium	59600		10000	112	70-130	4	20	4	6020
Tungsten	109		100	109	43-133	6	20		6020
Mercury	0.906		1.00	91	69-134	2	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 - DISSOLVED

Client ID: MSA-SW42C-080514 MSD
Lab ID: 240-40408-23 MSD
Lab Name: TestAmerica Canton
Job No.: 240-40408-1
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	104		100	104	44-153	6	20		6020
Arsenic	1030		1000	103	82-123	9	20		6020
Barium	1150		1000	113	45-144	7	20		6020
Beryllium	941		1000	94	77-124	7	20		6020
Cadmium	1080		1000	108	78-117	4	20		6020
Chromium	1010		1000	101	72-110	5	20		6020
Cobalt	982		1000	98	67-114	5	20		6020
Copper	1020		1000	101	60-123	4	20		6020
Lead	985		1000	98	73-115	7	20		6020
Molybdenum	107		100	105	80-110	7	20		6020
Nickel	996		1000	99	72-111	7	20		6020
Selenium	947		1000	95	72-148	7	20		6020
Silver	97.8		100	98	10-139	6	20		6020
Thallium	234		250	94	69-117	7	20		6020
Vanadium	1020		1000	102	70-112	5	20		6020
Zinc	1060		1000	105	49-156	5	20		6020
Calcium	36200		10000	102	70-130	4	20		6020
Magnesium	58600		10000	76	70-130	4	20	4	6020
Tungsten	104		100	103	43-133	3	20		6020
Mercury	0.826		1.00	83	69-134	6	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

Client ID: _____ Lab ID: 240-40409-B-1-D MSD

Lab Name: TestAmerica Canton Job No.: 240-40408-1

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	0.934		1.00	93	69-134	5	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 240-142276/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTICPMSB_00018

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	108		108	80	120		6020
Arsenic	1000	998		100	80	120		6020
Barium	1000	1110		111	80	120		6020
Beryllium	1000	1050		105	80	120		6020
Cadmium	1000	1070		107	80	120		6020
Chromium	1000	1110		111	80	120		6020
Cobalt	1000	1140		114	80	120		6020
Copper	1000	1090		109	80	120		6020
Lead	1000	1050		105	80	120		6020
Molybdenum	100	103		103	80	120		6020
Nickel	1000	1140		114	80	120		6020
Selenium	1000	983		98	80	120		6020
Silver	100	109		109	80	120		6020
Thallium	250	269		108	80	120		6020
Vanadium	1000	1090		109	80	120		6020
Zinc	1000	1160		116	80	120		6020
Calcium	10000	9870		99	80	120		6020
Magnesium	10000	10800		108	80	120		6020
Tungsten	100	110		110	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 240-142080/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTICPMSB_00018

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	90.9		91	80	120		6020
Arsenic	1000	880		88	80	120		6020
Barium	1000	930		93	80	120		6020
Beryllium	1000	963		96	80	120		6020
Cadmium	1000	907		91	80	120		6020
Chromium	1000	911		91	80	120		6020
Cobalt	1000	922		92	80	120		6020
Lead	1000	859		86	80	120		6020
Molybdenum	100	85.8		86	80	120		6020
Nickel	1000	948		95	80	120		6020
Selenium	1000	848		85	80	120		6020
Silver	100	91.2		91	80	120		6020
Thallium	250	221		88	80	120		6020
Vanadium	1000	912		91	80	120		6020
Zinc	1000	967		97	80	120		6020
Calcium	10000	8440		84	80	120		6020
Magnesium	10000	8900		89	80	120		6020
Tungsten	100	90.5		90	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 240-142080/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTICPMSA_00018

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Copper	1000	1000		100	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 240-142287/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTICPMSB_00018

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	103		103	80	120		6020
Arsenic	1000	1010		101	80	120		6020
Barium	1000	1130		113	80	120		6020
Beryllium	1000	961		96	80	120		6020
Cadmium	1000	1110		111	80	120		6020
Chromium	1000	1040		104	80	120		6020
Cobalt	1000	1040		104	80	120		6020
Copper	1000	1080		108	80	120		6020
Lead	1000	1050		105	80	120		6020
Molybdenum	100	103		103	80	120		6020
Nickel	1000	1020		102	80	120		6020
Selenium	1000	967		97	80	120		6020
Silver	100	106		106	80	120		6020
Thallium	250	255		102	80	120		6020
Vanadium	1000	1010		101	80	120		6020
Zinc	1000	1110		111	80	120		6020
Calcium	10000	10500		105	80	120		6020
Magnesium	10000	10400		104	80	120		6020
Tungsten	100	103		103	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 240-142088/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTHGCALW_00696

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.65		93	81	123		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 240-142277/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTHGCALW_00697

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.81		96	81	123		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 240-142288/2-A

Lab Name: TestAmerica Canton Job No.: 240-40408-1

Sample Matrix: Water LCS Source: MTHGCALW_00697

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.43		89	81	123		7470A

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

FORM VIIA - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/12/2014 End Date: 08/12/2014

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 240-142496/2	11:31	100		100		100		100		100	
STD1 240-142496/3 IC	11:35	99		95		97		95		95	
STD2 240-142496/4 IC	11:39	96		93		97		91		93	
STD3 240-142496/5 IC	11:42	96		94		96		91		93	
STD4 240-142496/6 IC	11:46	102		94		98		95		96	
ICV 240-142496/7	11:49	96		92		96		92		94	
ICB 240-142496/8	11:53	98		92		96		94		94	
CRI 240-142496/9	11:57	98		95		98		97		97	
ICSA 240-142496/10	12:00	92		90		95		89		92	
ICSAB 240-142496/11	12:04	90		89		91		88		89	
CCV 240-142496/71	15:51	85		83		95		89		90	
CCB 240-142496/72	15:54	93		87		99		96		94	
MB 240-142276/1-A	16:10	79		82		92		92		92	
LCS 240-142276/2-A	16:14	74		76		88		85		83	
240-40408-7	16:17	68		80		90		81		82	
240-40408-7 SD	16:21	80		90		100		93		94	
240-40408-7 MS	16:24	72		83		91		87		85	
240-40408-7 MSD	16:28	70		78		87		82		82	
240-40408-8	16:31	69		84		94		84		85	
240-40408-9	16:35	70		90		98		88		90	
CCV 240-142496/83	16:38	85		93		100		96		97	
CCB 240-142496/84	16:42	86		91		98		97		95	
240-40408-10	16:46	69		84		94		84		86	
240-40408-11	16:49	70		91		100		90		92	
240-40408-12	16:53	70		92		97		91		93	
240-40408-13	16:57	71		92		103		90		92	
240-40408-14	17:00	73		98		106		94		96	
240-40408-15	17:04	72		99		101		93		95	
240-40408-16	17:08	71		94		100		91		93	
240-40408-17	17:11	78		94		112		91		93	
240-40408-18	17:15	75		101		105		95		97	
240-40408-19	17:19	74		99		103		94		95	
CCV 240-142496/95	17:22	97		111		116		109		109	
CCB 240-142496/96	17:26	90		109		99		111		112	
240-40408-20	17:30	74		95		106		93		96	
240-40408-21	17:33	77		103		111		98		101	
240-40408-22	17:37	76		108		112		102		103	
MB 240-142080/1-A	17:55	84		98		107		104		103	
LCS 240-142080/2-A	17:59	86		93		103		101		100	
CCV 240-142496/107	18:06	94		106		112		102		105	
CCB 240-142496/108	18:09	100		106		112		110		110	
240-40408-1	18:23	75		92		102		89		90	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/12/2014 End Date: 08/12/2014

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
240-40408-2	18:27	72		92		101		88		91	
240-40408-3	18:31	79		105		108		99		101	
240-40408-4	18:35	73		92		101		89		93	
240-40408-5	18:38	75		95		104		92		94	
240-40408-6	18:42	75		95		103		92		94	
CCV 240-142496/119	18:49	87		99		106		95		98	
CCB 240-142496/120	18:53	90		99		103		100		100	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/12/2014 End Date: 08/12/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-142496/2	11:31	100		100		100					
STD1 240-142496/3 IC	11:35	96		97		98					
STD2 240-142496/4 IC	11:39	95		95		93					
STD3 240-142496/5 IC	11:42	96		96		91					
STD4 240-142496/6 IC	11:46	97		96		101					
ICV 240-142496/7	11:49	94		95		93					
ICB 240-142496/8	11:53	95		95		94					
CRI 240-142496/9	11:57	97		97		97					
ICSA 240-142496/10	12:00	95		96		95					
ICSAB 240-142496/11	12:04	94		95		96					
CCV 240-142496/71	15:51	95		96		96					
CCB 240-142496/72	15:54	97		99		99					
MB 240-142276/1-A	16:10	97		97		112					
LCS 240-142276/2-A	16:14	92		93		103					
240-40408-7	16:17	89		91		87					
240-40408-7 SD	16:21	96		100		96					
240-40408-7 MS	16:24	94		96		92					
240-40408-7 MSD	16:28	90		92		88					
240-40408-8	16:31	92		92		88					
240-40408-9	16:35	94		95		89					
CCV 240-142496/83	16:38	100		101		98					
CCB 240-142496/84	16:42	96		97		96					
240-40408-10	16:46	90		91		88					
240-40408-11	16:49	95		96		89					
240-40408-12	16:53	96		96		90					
240-40408-13	16:57	94		97		91					
240-40408-14	17:00	99		99		93					
240-40408-15	17:04	99		99		94					
240-40408-16	17:08	94		96		90					
240-40408-17	17:11	96		98		91					
240-40408-18	17:15	100		101		94					
240-40408-19	17:19	99		101		93					
CCV 240-142496/95	17:22	113		114		110					
CCB 240-142496/96	17:26	112		113		112					
240-40408-20	17:30	99		99		96					
240-40408-21	17:33	103		104		96					
240-40408-22	17:37	107		108		98					
MB 240-142080/1-A	17:55	106		106		109					
LCS 240-142080/2-A	17:59	108		110		110					
CCV 240-142496/107	18:06	109		108		103					
CCB 240-142496/108	18:09	111		110		110					
240-40408-1	18:23	93		94		88					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/12/2014 End Date: 08/12/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-40408-2	18:27	94		95		88					
240-40408-3	18:31	103		104		97					
240-40408-4	18:35	95		95		89					
240-40408-5	18:38	97		98		90					
240-40408-6	18:42	98		99		91					
CCV 240-142496/119	18:49	99		99		96					
CCB 240-142496/120	18:53	99		101		99					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/13/2014 End Date: 08/13/2014

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
STD1 240-142777/3 IC	15:22	105		107		104		103		104	
STD2 240-142777/4 IC	15:25	98		101		96		95		97	
STD3 240-142777/5 IC	15:29	100		100		97		94		95	
STD4 240-142777/6 IC	15:33	107		103		102		103		103	
ICV 240-142777/7	15:36	103		99		97		97		97	
ICB 240-142777/8	15:40	104		101		101		101		99	
CRI 240-142777/9	15:44	107		105		102		103		102	
ICSA 240-142777/10	15:47	95		97		94		92		93	
ICSAB 240-142777/11	15:51	95		94		94		90		93	
CCV 240-142777/40	17:34	100		103		104		101		99	
CCB 240-142777/41	17:38	101		101		100		103		100	
MB 240-142080/1-A	17:41	91		96		98		98		95	
LCS 240-142080/2-A	17:45	92		96		96		98		94	
240-40408-1	17:48	87		89		92		86		87	
240-40408-2	17:52	90		93		94		87		88	
240-40408-3	17:56	94		96		97		89		91	
240-40408-4	17:59	89		92		91		86		88	
240-40408-5	18:03	93		94		95		87		88	
240-40408-6	18:06	97		97		97		90		91	
MB 240-142287/1-A	18:10	96		96		95		96		93	
LCS 240-142287/2-A	18:14	93		93		95		95		93	
CCV 240-142777/52	18:17	99		103		99		101		102	
CCB 240-142777/53	18:21	97		97		97		99		95	
240-40408-23	18:24	92		89		96		86		87	
240-40408-23 SD	18:28	100		104		100		100		100	
240-40408-23 MS	18:32	85		88		90		84		84	
240-40408-23 MSD	18:35	89		91		93		88		89	
240-40408-24	18:38	93		95		97		90		91	
240-40408-25	18:42	91		94		94		87		88	
240-40408-26	18:45	93		97		97		89		91	
240-40408-27	18:49	90		97		95		90		91	
240-40408-28	18:53	90		93		96		87		88	
240-40408-29	18:56	94		98		98		89		90	
CCV 240-142777/64	19:00	99		105		100		101		102	
CCB 240-142777/65	19:04	102		97		102		99		99	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/13/2014 End Date: 08/13/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-142777/3 IC	15:22	104		103		105					
STD2 240-142777/4 IC	15:25	97		98		101					
STD3 240-142777/5 IC	15:29	98		98		97					
STD4 240-142777/6 IC	15:33	103		102		106					
ICV 240-142777/7	15:36	99		100		100					
ICB 240-142777/8	15:40	99		100		100					
CRI 240-142777/9	15:44	102		101		106					
ICSA 240-142777/10	15:47	97		97		99					
ICSAB 240-142777/11	15:51	96		96		96					
CCV 240-142777/40	17:34	103		104		103					
CCB 240-142777/41	17:38	102		104		105					
MB 240-142080/1-A	17:41	98		100		107					
LCS 240-142080/2-A	17:45	100		100		103					
240-40408-1	17:48	92		93		90					
240-40408-2	17:52	92		92		90					
240-40408-3	17:56	94		95		93					
240-40408-4	17:59	92		92		88					
240-40408-5	18:03	92		92		88					
240-40408-6	18:06	94		95		93					
MB 240-142287/1-A	18:10	97		97		100					
LCS 240-142287/2-A	18:14	99		99		101					
CCV 240-142777/52	18:17	105		105		105					
CCB 240-142777/53	18:21	99		101		103					
240-40408-23	18:24	92		92		92					
240-40408-23 SD	18:28	102		103		102					
240-40408-23 MS	18:32	92		91		89					
240-40408-23 MSD	18:35	94		97		93					
240-40408-24	18:38	95		95		94					
240-40408-25	18:42	92		93		89					
240-40408-26	18:45	94		95		92					
240-40408-27	18:49	95		96		93					
240-40408-28	18:53	92		92		89					
240-40408-29	18:56	94		96		89					
CCV 240-142777/64	19:00	105		104		104					
CCB 240-142777/65	19:04	99		99		105					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I11 Start Date: 08/14/2014 End Date: 08/14/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
ICIS 240-142921/1	12:04	100		100		100		100		100	
STD2 240-142921/2 IC	12:11	86		94		98		94		91	
STD3 240-142921/3 IC	12:18	77		89		90		85		80	
STD4 240-142921/4 IC	12:25	100		104		101		100		99	
ICV 240-142921/5	12:32	85		94		97		91		86	
ICB 240-142921/6	12:39	95		96		98		98		92	
CRI 240-142921/7	12:46	91		93		96		96		93	
ICSA 240-142921/8	12:53	63		74		77		74		70	
ICSAB 240-142921/9	13:01	63		74		78		74		70	
CCV 240-142921/47	17:31	75		76		85		84		82	
CCB 240-142921/48	17:38	88		82		90		92		87	
240-40408-30	17:45	51		61		69		64		59	
240-40408-31	17:52	50		61		69		63		59	
240-40408-32	17:59	52		61		68		62		60	
240-40408-33	18:06	51		60		68		63		60	
240-40408-34	18:13	52		60		70		63		62	
240-40408-35	18:20	53		60		70		63		61	
240-40408-36	18:27	55		61		70		64		62	
CCV 240-142921/56	18:34	91		85		91		91		90	
CCB 240-142921/57	18:41	96		88		94		95		93	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

ICP-MS Instrument ID: I11 Start Date: 08/14/2014 End Date: 08/14/2014

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
ICIS 240-142921/1	12:04			100							
STD2 240-142921/2 IC	12:11			88							
STD3 240-142921/3 IC	12:18			77							
STD4 240-142921/4 IC	12:25			92							
ICV 240-142921/5	12:32			84							
ICB 240-142921/6	12:39			89							
CRI 240-142921/7	12:46			90							
ICSA 240-142921/8	12:53			66							
ICSAB 240-142921/9	13:01			65							
CCV 240-142921/47	17:31			80							
CCB 240-142921/48	17:38			89							
240-40408-30	17:45			61							
240-40408-31	17:52			61							
240-40408-32	17:59			61							
240-40408-33	18:06			63							
240-40408-34	18:13			63							
240-40408-35	18:20			63							
240-40408-36	18:27			65							
CCV 240-142921/56	18:34			93							
CCB 240-142921/57	18:41			95							

MSA-SC-44B-080514 Internal Std.

240-40408-c-30-a 8/14/2014 17:45:09 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		51.258%	0.006	M 204.500
%RSD		1.873	57.670	M 3.084
Run	**Time**	**23Na**	**25Mg**	**27Al**
		ppb	ppb	ppb
x		TM 414500.000	M 53170.000	-1.439
%RSD		TM 2.798	M 0.858	37.460
Run	**Time**	**35Cl**	**39K**	**43Ca**
		ppb	ppb	ppb
x		T 0.000	T 18340.000	23650.000
%RSD		T 0.000	T 1.178	1.683
Run	**Time**	**45Sc**	**45Sc CCT**	**47Ti**
		ppb	ppb	ppb
x		T 61.380%	68.883%	0.106
%RSD		T 1.246	0.499	165.900
Run	**Time**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb
x		0.894	0.317	1.593
%RSD		15.350	4.467	5.732
Run	**Time**	**55Mn**	**56Fe**	**59Co**
		ppb	ppb	ppb
x		6.696	6.107	0.067
%RSD		0.180	6.732	7.814
Run	**Time**	**60Ni**	**65Cu**	**66Zn**
		ppb	ppb	ppb
x		1.851	7.361	3.267
%RSD		4.426	0.460	8.758
Run	**Time**	**72Ge**	**75As**	**77Ar Cl**
		ppb	ppb	ppb
x		63.564%	1.095	-0.023
%RSD		0.331	1.180	33.890
Run	**Time**	**78Se**	**88Sr**	**95Mo**
		ppb	ppb	ppb
x		0.237	M 342.900	1.821
%RSD		49.840	M 2.917	2.261
Run	**Time**	**105Pd**	**107Ag**	**108Mo O**
		ppb	ppb	ppb
x		0.000	0.001	1.208
%RSD		0.000	95.210	129.400
Run	**Time**	**111Cd**	**115In**	**118Sn**
		ppb	ppb	ppb
x		0.183	59.429%	0.733
%RSD		8.541	1.841	20.040
Run	**Time**	**121Sb**	**137Ba**	**159Tb**
		ppb	ppb	ppb
x		0.348	17.860	0.000
%RSD		2.682	2.960	0.000
Run	**Time**	**165Ho**	**182W**	**205Tl**
		ppb	ppb	ppb
x		60.940%	0.136	0.354
%RSD		1.483	4.519	0.973
Run	**Time**	**208Pb**	**209Bi**	
		ppb	ppb	
x		0.037	0.000	
%RSD		9.030	0.000	

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-40408-7

SDG No:

Lab Name: TestAmerica Canton Job No: 240-40408-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.69	J	1.80	J	NC		6020
Arsenic	1.3	J	1.97	J	NC		6020
Barium	SC<MDL 18		17.8	J	1.1 NC		6020
Beryllium	0.18	J	0.460	J	NC		6020
Cadmium	0.30	J	0.245	J	NC		6020
Chromium	0.37	J	10	U	NC		6020
Cobalt	0.18	J	0.175	J	NC		6020
Copper	10		19.4		NC		6020
Lead	0.61	J	1.21	J	NC		6020
Molybdenum	1.6	J	50	U	NC		6020
Nickel	2.0		1.83	J	NC		6020
Selenium	0.80	J	2.50	J	NC		6020
Silver	0.010	J	5.0	U	NC		6020
Thallium	2.0	U	10	U	NC		6020
Vanadium	0.66	J	25	U	NC		6020
Zinc	9.9	J	100	U	NC		6020
Calcium	24000		23900		NC		6020
Magnesium	48000		49400		NC		6020
Tungsten	0.67	J	2.03	J	NC		6020

JD 10-2-14

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 - DISSOLVED

Lab ID: 240-40408-23

SDG No:

Lab Name: TestAmerica Canton Job No: 240-40408-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.25	J	10	U	NC		6020
Arsenic	1.3	J	1.66	J	NC		6020
Barium	18		17.1	J	5 NC		6020
Beryllium	0.064	J	0.230	J	NC		6020
Cadmium	0.25	J	0.200	J	NC		6020
Chromium	0.38	J	10	U	NC		6020
Cobalt	0.14	J	0.170	J	NC		6020
Copper	7.1		6.56	J	NC		6020
Lead	0.38	J	5.0	U	NC		6020
Molybdenum	1.6	J	50	U	NC		6020
Nickel	2.1		2.14	J	NC		6020
Selenium	0.40	J	25	U	NC		6020
Silver	0.011	J	5.0	U	NC		6020
Thallium	2.0	U	10	U	NC		6020
Vanadium	0.82	J	25	U	NC		6020
Zinc	8.2	J	100	U	NC		6020
Calcium	26000		24300		NC		6020
Magnesium	51000		49000		NC		6020
Tungsten	0.86	J	1.54	J	79 NC		6020

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 MDL Date: 09/13/2013 14:08

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.11
Arsenic	75.00	5	0.063
Barium	137.00	5	0.32
Beryllium	9.00	1	0.031
Cadmium	111.00	1	0.026
Chromium	52.00	2	0.13
Cobalt	59.00	1	0.02
Copper	65.00	2	0.24
Lead	208.00	1	0.14
Molybdenum	95.00	10	0.81
Nickel	60.00	2	0.088
Selenium	78.00	5	0.34
Silver	107.00	1	0.0083
Thallium	205.00	2	0.4
Tungsten	182.00	10	0.017
Vanadium	51.00	5	0.15
Zinc	66.00	20	2.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 XMDL Date: 09/13/2013 14:09

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.11
Arsenic	75.00	5	0.063
Barium	137.00	5	0.32
Beryllium	9.00	1	0.031
Cadmium	111.00	1	0.026
Chromium	52.00	2	0.13
Cobalt	59.00	1	0.02
Copper	65.00	2	0.24
Lead	208.00	1	0.14
Molybdenum	95.00	10	0.81
Nickel	60.00	2	0.088
Selenium	78.00	5	0.34
Silver	107.00	1	0.0083
Thallium	205.00	2	0.4
Tungsten	182.00	10	0.017
Vanadium	51.00	5	0.15
Zinc	66.00	20	2.08

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

SDG Number:

Matrix: Water Instrument ID: I11

Method: 6020 MDL Date: 09/13/2013 14:08

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.11
Arsenic	75.00	5	0.063
Barium	137.00	5	0.32
Beryllium	9.00	1	0.031
Cadmium	111.00	1	0.026
Chromium	52.00	2	0.13
Cobalt	59.00	1	0.02
Copper	65.00	2	0.24
Lead	208.00	1	0.14
Molybdenum	95.00	10	0.81
Nickel	60.00	2	0.088
Selenium	78.00	5	0.34
Silver	107.00	1	0.0083
Thallium	205.00	2	0.4
Tungsten	182.00	10	0.017
Vanadium	51.00	5	0.15
Zinc	66.00	20	2.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

SDG Number:

Matrix: Water Instrument ID: I11

Method: 6020 XMDL Date: 09/13/2013 14:09

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.11
Arsenic	75.00	5	0.063
Barium	137.00	5	0.32
Beryllium	9.00	1	0.031
Cadmium	111.00	1	0.026
Chromium	52.00	2	0.13
Cobalt	59.00	1	0.02
Copper	65.00	2	0.24
Lead	208.00	1	0.14
Molybdenum	95.00	10	0.81
Nickel	60.00	2	0.088
Selenium	78.00	5	0.34
Silver	107.00	1	0.0083
Thallium	205.00	2	0.4
Tungsten	182.00	10	0.017
Vanadium	51.00	5	0.15
Zinc	66.00	20	2.08

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-40408-1

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: 240-40408-1

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

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-142080/1-A	08/08/2014 10:50	142080		50	50
LCS 240-142080/2-A	08/08/2014 10:50	142080		50	50
240-40408-1	08/08/2014 10:50	142080		50	50
240-40408-2	08/08/2014 10:50	142080		50	50
240-40408-3	08/08/2014 10:50	142080		50	50
240-40408-4	08/08/2014 10:50	142080		50	50
240-40408-5	08/08/2014 10:50	142080		50	50
240-40408-6	08/08/2014 10:50	142080		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-142276/1-A	08/11/2014 09:28	142276		50	50
LCS 240-142276/2-A	08/11/2014 09:28	142276		50	50
240-40408-7	08/11/2014 09:28	142276		50	50
240-40408-7 MS	08/11/2014 09:28	142276		50	50
240-40408-7 MSD	08/11/2014 09:28	142276		50	50
240-40408-8	08/11/2014 09:28	142276		50	50
240-40408-9	08/11/2014 09:28	142276		50	50
240-40408-10	08/11/2014 09:28	142276		50	50
240-40408-11	08/11/2014 09:28	142276		50	50
240-40408-12	08/11/2014 09:28	142276		50	50
240-40408-13	08/11/2014 09:28	142276		50	50
240-40408-14	08/11/2014 09:28	142276		50	50
240-40408-15	08/11/2014 09:28	142276		50	50
240-40408-16	08/11/2014 09:28	142276		50	50
240-40408-17	08/11/2014 09:28	142276		50	50
240-40408-18	08/11/2014 09:28	142276		50	50
240-40408-19	08/11/2014 09:28	142276		50	50
240-40408-20	08/11/2014 09:28	142276		50	50
240-40408-21	08/11/2014 09:28	142276		50	50
240-40408-22	08/11/2014 09:28	142276		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/12/2014 11:28 End Date: 08/12/2014 22:53

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			11:28																			
ICIS 240-142496/2	1		11:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 240-142496/3 IC	1		11:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 240-142496/4 IC	1		11:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 240-142496/5 IC	1		11:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 240-142496/6 IC	1		11:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 240-142496/7	1		11:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 240-142496/8	1		11:53	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CRI 240-142496/9	1		11:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 240-142496/10	1		12:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 240-142496/11	1		12:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-142496/12			12:08																			
CCB 240-142496/13			12:11																			
ZZZZZZ			12:15																			
CCV 240-142496/15			12:18																			
CCB 240-142496/16			12:22																			
CRI 240-142496/17			12:26																			
CCV 240-142496/187			12:35																			
CCB 240-142496/188			12:39																			
ZZZZZZ			12:42																			
ZZZZZZ			12:46																			
ZZZZZZ			12:49																			
ZZZZZZ			12:53																			
ZZZZZZ			12:56																			
ZZZZZZ			13:00																			
ZZZZZZ			13:03																			
ZZZZZZ			13:07																			
ZZZZZZ			13:10																			
ZZZZZZ			13:14																			
CCV 240-142496/28			13:18																			
CCB 240-142496/29			13:21																			
ZZZZZZ			13:25																			
ZZZZZZ			13:29																			
ZZZZZZ			13:32																			
ZZZZZZ			13:36																			
ZZZZZZ			13:39																			
ZZZZZZ			13:43																			
ZZZZZZ			13:47																			
ZZZZZZ			13:50																			
ZZZZZZ			13:54																			
ZZZZZZ			13:58																			
CCV 240-142496/40			14:01																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/12/2014 11:28 End Date: 08/12/2014 22:53

Lab Sample ID	D/F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn
CCB 240-142496/41			14:05																			
ZZZZZZ			14:08																			
ZZZZZZ			14:12																			
ZZZZZZ			14:16																			
ZZZZZZ			14:19																			
ZZZZZZ			14:23																			
ZZZZZZ			14:27																			
ZZZZZZ			14:30																			
ZZZZZZ			14:34																			
ZZZZZZ			14:37																			
ZZZZZZ			14:41																			
CCV 240-142496/52			14:44																			
CCB 240-142496/53			14:48																			
ZZZZZZ			14:51																			
ZZZZZZ			14:55																			
ZZZZZZ			14:58																			
ZZZZZZ			15:02																			
ZZZZZZ			15:05																			
ZZZZZZ			15:09																			
ZZZZZZ			15:12																			
ZZZZZZ			15:15																			
ZZZZZZ			15:19																			
ZZZZZZ			15:22																			
CCV 240-142496/64			15:26																			
CCB 240-142496/65			15:29																			
ZZZZZZ			15:33																			
ZZZZZZ			15:36																			
CCV 240-142496/68			15:40																			
CCB 240-142496/69			15:43																			
CRI 240-142496/70			15:47																			
CCV 240-142496/71	1		15:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142496/72	1		15:54	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			16:03																			
ZZZZZZ			16:07																			
MB 240-142276/1-A	1	R	16:10	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
LCS 240-142276/2-A	1	R	16:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-40408-7	1	D	16:17	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-7 SD	5	D	16:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-7 MS	1	D	16:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-40408-7 MSD	1	D	16:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-40408-8	1	D	16:31	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-9	1	D	16:35	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.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/12/2014 11:28 End Date: 08/12/2014 22:53

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
CCV 240-142496/83	1		16:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142496/84	1		16:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-10	1	D	16:46	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-11	1	D	16:49	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-12	1	D	16:53	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-13	1	D	16:57	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-14	1	D	17:00	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-15	1	D	17:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-16	1	D	17:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-17	1	D	17:11	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-18	1	D	17:15	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-19	1	D	17:19	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CCV 240-142496/95	1		17:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142496/96	1		17:26	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-20	1	D	17:30	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-21	1	D	17:33	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-22	1	D	17:37	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			17:40																			
ZZZZZZ			17:44																			
ZZZZZZ			17:48																			
ZZZZZZ			17:51																			
MB 240-142080/1-A	1	R	17:55	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
LCS 240-142080/2-A	1	R	17:59	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
ZZZZZZ			18:02																			
CCV 240-142496/107	1		18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142496/108	1		18:09	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			18:13																			
ZZZZZZ			18:17																			
ZZZZZZ			18:20																			
240-40408-1	1	D	18:23	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
240-40408-2	1	D	18:27	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
240-40408-3	1	D	18:31	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
240-40408-4	1	D	18:35	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
240-40408-5	1	D	18:38	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
240-40408-6	1	D	18:42	X	X	X	X		X	X	X			X	X	X	X	X	X	X	X	X
ZZZZZZ			18:46																			
CCV 240-142496/119	1		18:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142496/120	1		18:53	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			18:57																			
ZZZZZZ			19:00																			
ZZZZZZ			19:04																			
ZZZZZZ			19:08																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/12/2014 11:28 End Date: 08/12/2014 22:53

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			19:11																				
ZZZZZZ			19:15																				
ZZZZZZ			19:19																				
ZZZZZZ			19:22																				
ZZZZZZ			19:26																				
ZZZZZZ			19:30																				
CCV 240-142496/131			19:33																				
CCB 240-142496/132			19:37																				
ZZZZZZ			19:41																				
ZZZZZZ			19:44																				
ZZZZZZ			19:48																				
ZZZZZZ			19:52																				
ZZZZZZ			19:55																				
ZZZZZZ			19:59																				
ZZZZZZ			20:03																				
ZZZZZZ			20:06																				
ZZZZZZ			20:09																				
ZZZZZZ			20:13																				
CCV 240-142496/143			20:16																				
CCB 240-142496/144			20:20																				
ZZZZZZ			20:24																				
ZZZZZZ			20:28																				
ZZZZZZ			20:31																				
ZZZZZZ			20:35																				
ZZZZZZ			20:39																				
ZZZZZZ			20:42																				
ZZZZZZ			20:46																				
ZZZZZZ			20:50																				
ZZZZZZ			20:53																				
ZZZZZZ			20:57																				
CCV 240-142496/155			21:01																				
CCB 240-142496/156			21:05																				
ZZZZZZ			21:08																				
ZZZZZZ			21:12																				
ZZZZZZ			21:15																				
ZZZZZZ			21:19																				
ZZZZZZ			21:22																				
ZZZZZZ			21:25																				
ZZZZZZ			21:29																				
ZZZZZZ			21:32																				
ZZZZZZ			21:36																				
ZZZZZZ			21:40																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/12/2014 11:28 End Date: 08/12/2014 22:53

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	
CCV 240-142496/167			21:43																				
CCB 240-142496/168			21:47																				
ZZZZZZ			21:51																				
ZZZZZZ			21:54																				
ZZZZZZ			21:58																				
ZZZZZZ			22:02																				
ZZZZZZ			22:05																				
ZZZZZZ			22:09																				
ZZZZZZ			22:13																				
ZZZZZZ			22:16																				
ZZZZZZ			22:20																				
ZZZZZZ			22:24																				
CCV 240-142496/179			22:27																				
CCB 240-142496/180			22:31																				
ZZZZZZ			22:35																				
ZZZZZZ			22:39																				
ZZZZZZ			22:42																				
ZZZZZZ			22:46																				
CCV 240-142496/185			22:50																				
CCB 240-142496/186			22:53																				

Prep Types

D = Dissolved

R = Total Recoverable

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-142287/1-A	08/11/2014 09:58	142287		50	50
LCS 240-142287/2-A	08/11/2014 09:58	142287		50	50
240-40408-23	08/11/2014 09:58	142287		50	50
240-40408-23 MS	08/11/2014 09:58	142287		50	50
240-40408-23 MSD	08/11/2014 09:58	142287		50	50
240-40408-24	08/11/2014 09:58	142287		50	50
240-40408-25	08/11/2014 09:58	142287		50	50
240-40408-26	08/11/2014 09:58	142287		50	50
240-40408-27	08/11/2014 09:58	142287		50	50
240-40408-28	08/11/2014 09:58	142287		50	50
240-40408-29	08/11/2014 09:58	142287		50	50
240-40408-30	08/11/2014 09:58	142287		50	50
240-40408-31	08/11/2014 09:58	142287		50	50
240-40408-32	08/11/2014 09:58	142287		50	50
240-40408-33	08/11/2014 09:58	142287		50	50
240-40408-34	08/11/2014 09:58	142287		50	50
240-40408-35	08/11/2014 09:58	142287		50	50
240-40408-36	08/11/2014 09:58	142287		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/13/2014 15:14 End Date: 08/13/2014 21:22

Lab Sample ID	D/F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn
ZZZZZZ			15:14																			
ICIS 240-142777/2			15:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 240-142777/3 IC	1		15:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 240-142777/4 IC	1		15:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 240-142777/5 IC	1		15:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 240-142777/6 IC	1		15:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 240-142777/7	1		15:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 240-142777/8	1		15:40	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CRI 240-142777/9	1		15:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 240-142777/10	1		15:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 240-142777/11	1		15:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-142777/12			15:54																			
CCB 240-142777/13			15:58																			
ZZZZZZ			16:02																			
ZZZZZZ			16:05																			
ZZZZZZ			16:09																			
ZZZZZZ			16:12																			
ZZZZZZ			16:16																			
ZZZZZZ			16:20																			
CCV 240-142777/20			16:23																			
CCB 240-142777/21			16:27																			
ZZZZZZ			16:31																			
ZZZZZZ			16:34																			
ZZZZZZ			16:38																			
ZZZZZZ			16:41																			
ZZZZZZ			16:45																			
ZZZZZZ			16:49																			
CCV 240-142777/28			16:52																			
CCB 240-142777/29			16:56																			
ZZZZZZ			17:00																			
ZZZZZZ			17:03																			
ZZZZZZ			17:07																			
ZZZZZZ			17:10																			
ZZZZZZ			17:14																			
ZZZZZZ			17:17																			
ZZZZZZ			17:20																			
ZZZZZZ			17:24																			
ZZZZZZ			17:27																			
ZZZZZZ			17:31																			
CCV 240-142777/40	1		17:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142777/41	1		17:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
MB 240-142080/1-A	1	R	17:41									X										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/13/2014 15:14 End Date: 08/13/2014 21:22

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
LCS 240-142080/2-A	1	R	17:45									X										
240-40408-1	1	D	17:48									X										
240-40408-2	1	D	17:52									X										
240-40408-3	1	D	17:56									X										
240-40408-4	1	D	17:59									X										
240-40408-5	1	D	18:03									X										
240-40408-6	1	D	18:06									X										
MB 240-142287/1-A	1	R	18:10	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
LCS 240-142287/2-A	1	R	18:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-142777/52	1		18:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142777/53	1		18:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-23	1	D	18:24	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-23 SD	5	D	18:28	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-23 MS	1	D	18:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-40408-23 MSD	1	D	18:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-40408-24	1	D	18:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-25	1	D	18:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-26	1	D	18:45	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-27	1	D	18:49	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-28	1	D	18:53	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-40408-29	1	D	18:56	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CCV 240-142777/64	1		19:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-142777/65	1		19:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			19:07																			
ZZZZZZ			19:11																			
ZZZZZZ			19:15																			
ZZZZZZ			19:18																			
ZZZZZZ			19:22																			
ZZZZZZ			19:26																			
ZZZZZZ			19:29																			
ZZZZZZ			19:33																			
ZZZZZZ			19:37																			
ZZZZZZ			19:40																			
CCV 240-142777/76			19:44																			
CCB 240-142777/77			19:48																			
ZZZZZZ			19:51																			
ZZZZZZ			19:55																			
ZZZZZZ			19:59																			
ZZZZZZ			20:02																			
ZZZZZZ			20:06																			
ZZZZZZ			20:09																			
ZZZZZZ			20:13																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/13/2014 15:14 End Date: 08/13/2014 21:22

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			20:17																				
ZZZZZZ			20:20																				
ZZZZZZ			20:23																				
CCV 240-142777/88			20:27																				
CCB 240-142777/89			20:31																				
ZZZZZZ			20:34																				
ZZZZZZ			20:38																				
ZZZZZZ			20:42																				
ZZZZZZ			20:45																				
ZZZZZZ			20:49																				
ZZZZZZ			20:53																				
ZZZZZZ			20:57																				
ZZZZZZ			21:00																				
ZZZZZZ			21:04																				
ZZZZZZ			21:08																				
CCV 240-142777/100			21:11																				
CCB 240-142777/101			21:15																				
CCV 240-142777/102			21:19																				
CCB 240-142777/103			21:22																				

Prep Types

D = Dissolved

R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I11 Method: 6020

Start Date: 08/14/2014 12:04 End Date: 08/15/2014 03:20

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ICIS 240-142921/1	1		12:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD2 240-142921/2 IC	1		12:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD3 240-142921/3 IC	1		12:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD4 240-142921/4 IC	1		12:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV 240-142921/5	1		12:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB 240-142921/6	1		12:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-142921/7	1		12:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA 240-142921/8	1		12:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB 240-142921/9	1		13:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-142921/10			13:08																				
CCB 240-142921/11			13:15																				
ZZZZZZ			13:22																				
ZZZZZZ			13:29																				
ZZZZZZ			13:36																				
ZZZZZZ			13:43																				
ZZZZZZ			13:50																				
ZZZZZZ			13:57																				
ZZZZZZ			14:05																				
ZZZZZZ			14:12																				
ZZZZZZ			14:19																				
CCV 240-142921/21			14:26																				
CCB 240-142921/22			14:33																				
ZZZZZZ			14:40																				
ZZZZZZ			14:47																				
ZZZZZZ			14:54																				
ZZZZZZ			15:02																				
ZZZZZZ			15:09																				
ZZZZZZ			15:16																				
ZZZZZZ			15:23																				
ZZZZZZ			15:30																				
ZZZZZZ			15:37																				
ZZZZZZ			15:44																				
CCV 240-142921/33			15:51																				
CCB 240-142921/34			15:58																				
ZZZZZZ			16:05																				
ZZZZZZ			16:12																				
ZZZZZZ			16:20																				
ZZZZZZ			16:27																				
CCV 240-142921/39			16:34																				
CCB 240-142921/40			16:41																				
ZZZZZZ			16:48																				
ZZZZZZ			16:55																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I11 Method: 6020

Start Date: 08/14/2014 12:04 End Date: 08/15/2014 03:20

Lab Sample ID	D/F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			17:02																			
ZZZZZZ			17:09																			
ZZZZZZ			17:16																			
ZZZZZZ			17:23																			
CCV 240-142921/47	1		17:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB 240-142921/48	1		17:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-30	1	D	17:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-31	1	D	17:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-32	1	D	17:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-33	1	D	18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-34	1	D	18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-35	1	D	18:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
240-40408-36	1	D	18:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV 240-142921/56	1		18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB 240-142921/57	1		18:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ZZZZZZ			18:49																			
ZZZZZZ			18:56																			
ZZZZZZ			19:03																			
ZZZZZZ			19:10																			
ZZZZZZ			19:17																			
ZZZZZZ			19:24																			
ZZZZZZ			19:31																			
ZZZZZZ			19:38																			
ZZZZZZ			19:45																			
ZZZZZZ			19:52																			
CCV 240-142921/68			19:59																			
CCB 240-142921/69			20:06																			
ZZZZZZ			20:14																			
CCV 240-142921/71			20:21																			
CCB 240-142921/72			20:28																			
CRI 240-142921/73			20:35																			
ZZZZZZ			20:42																			
ZZZZZZ			20:49																			
ZZZZZZ			20:56																			
ZZZZZZ			21:03																			
ZZZZZZ			21:10																			
ZZZZZZ			21:17																			
ZZZZZZ			21:24																			
ZZZZZZ			21:32																			
ZZZZZZ			21:39																			
CCV 240-142921/83			21:46																			
CCB 240-142921/84			21:53																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I11 Method: 6020

Start Date: 08/14/2014 12:04 End Date: 08/15/2014 03:20

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			22:00																				
ZZZZZZ			22:07																				
ZZZZZZ			22:14																				
ZZZZZZ			22:21																				
ZZZZZZ			22:29																				
ZZZZZZ			22:36																				
ZZZZZZ			22:43																				
ZZZZZZ			22:50																				
ZZZZZZ			22:57																				
ZZZZZZ			23:04																				
CCV 240-142921/95			23:11																				
CCB 240-142921/96			23:18																				
ICSA 240-142921/97			23:25																				
ICSAB 240-142921/98			23:33																				
CCV 240-142921/99			23:40																				
CCB 240-142921/100			23:47																				
ZZZZZZ			23:54																				
CCV 240-142921/102			00:01																				
CCB 240-142921/103			00:08																				
ZZZZZZ			00:15																				
ZZZZZZ			00:22																				
ZZZZZZ			00:30																				
ZZZZZZ			00:37																				
ZZZZZZ			00:44																				
ZZZZZZ			00:51																				
ZZZZZZ			00:58																				
ZZZZZZ			01:05																				
ZZZZZZ			01:12																				
CCV 240-142921/113			01:19																				
CCB 240-142921/114			01:27																				
ZZZZZZ			01:34																				
ZZZZZZ			01:41																				
ZZZZZZ			01:48																				
ZZZZZZ			01:55																				
ZZZZZZ			02:02																				
ZZZZZZ			02:09																				
ZZZZZZ			02:16																				
ZZZZZZ			02:23																				
ZZZZZZ			02:31																				
ZZZZZZ			02:38																				
CCV 240-142921/125			02:45																				
CCB 240-142921/126			02:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: I11 Method: 6020

Start Date: 08/14/2014 12:04 End Date: 08/15/2014 03:20

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			02:59																				
ZZZZZZ			03:06																				
CCV 240-142921/129			03:13																				
CCB 240-142921/130			03:20																				

Prep Types

D = Dissolved

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-142088/1-A	08/08/2014 16:00	142088		50	50
LCS 240-142088/2-A	08/08/2014 16:00	142088		50	50
240-40409-B-1-C MS	08/08/2014 16:00	142088		50	50
240-40409-B-1-D MSD	08/08/2014 16:00	142088		50	50
240-40408-1	08/08/2014 16:00	142088		50	50
240-40408-2	08/08/2014 16:00	142088		50	50
240-40408-3	08/08/2014 16:00	142088		50	50
240-40408-4	08/08/2014 16:00	142088		50	50
240-40408-5	08/08/2014 16:00	142088		50	50
240-40408-6	08/08/2014 16:00	142088		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-142277/1-A	08/11/2014 14:55	142277		50	50
LCS 240-142277/2-A	08/11/2014 14:55	142277		50	50
240-40408-7	08/11/2014 14:55	142277		50	50
240-40408-7 MS	08/11/2014 14:55	142277		50	50
240-40408-7 MSD	08/11/2014 14:55	142277		50	50
240-40408-8	08/11/2014 14:55	142277		50	50
240-40408-9	08/11/2014 14:55	142277		50	50
240-40408-10	08/11/2014 14:55	142277		50	50
240-40408-11	08/11/2014 14:55	142277		50	50
240-40408-12	08/11/2014 14:55	142277		50	50
240-40408-13	08/11/2014 14:55	142277		50	50
240-40408-14	08/11/2014 14:55	142277		50	50
240-40408-15	08/11/2014 14:55	142277		50	50
240-40408-16	08/11/2014 14:55	142277		50	50
240-40408-17	08/11/2014 14:55	142277		50	50
240-40408-18	08/11/2014 14:55	142277		50	50
240-40408-19	08/11/2014 14:55	142277		50	50
240-40408-20	08/11/2014 14:55	142277		50	50
240-40408-21	08/11/2014 14:55	142277		50	50
240-40408-22	08/11/2014 14:55	142277		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-142288/1-A	08/11/2014 14:55	142288		50	50
LCS 240-142288/2-A	08/11/2014 14:55	142288		50	50
240-40408-23	08/11/2014 14:55	142288		50	50
240-40408-23 MS	08/11/2014 14:55	142288		50	50
240-40408-23 MSD	08/11/2014 14:55	142288		50	50
240-40408-24	08/11/2014 14:55	142288		50	50
240-40408-25	08/11/2014 14:55	142288		50	50
240-40408-26	08/11/2014 14:55	142288		50	50
240-40408-27	08/11/2014 14:55	142288		50	50
240-40408-28	08/11/2014 14:55	142288		50	50
240-40408-29	08/11/2014 14:55	142288		50	50
240-40408-30	08/11/2014 14:55	142288		50	50
240-40408-31	08/11/2014 14:55	142288		50	50
240-40408-32	08/11/2014 14:55	142288		50	50
240-40408-33	08/11/2014 14:55	142288		50	50
240-40408-34	08/11/2014 14:55	142288		50	50
240-40408-35	08/11/2014 14:55	142288		50	50
240-40408-36	08/11/2014 14:55	142288		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/11/2014 12:43 End Date: 08/11/2014 15:59

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-142328/1-A			12:43	X																				
IC 240-142328/2-A			12:44	X																				
IC 240-142328/3-A			12:46	X																				
IC 240-142328/4-A			12:48	X																				
IC 240-142328/5-A			12:50	X																				
IC 240-142328/6-A			12:51	X																				
ICV 240-142328/7-A	1		12:53	X																				
ICB 240-142328/8-A	1		12:55	X																				
CRA 240-142328/9-A	1		12:57	X																				
CCVL 240-142328/10-A	1		12:58	X																				
CCB 240-142328/12-A			13:00																					
ZZZZZZ			13:02																					
ZZZZZZ			13:03																					
ZZZZZZ			13:05																					
ZZZZZZ			13:06																					
ZZZZZZ			13:08																					
ZZZZZZ			13:10																					
ZZZZZZ			13:11																					
ZZZZZZ			13:13																					
ZZZZZZ			13:15																					
ZZZZZZ			13:16																					
CCV 240-142328/11-A			13:18																					
CCB 240-142328/12-A			13:20																					
ZZZZZZ			13:21																					
ZZZZZZ			13:23																					
ZZZZZZ			13:24																					
ZZZZZZ			13:26																					
ZZZZZZ			13:28																					
ZZZZZZ			13:30																					
ZZZZZZ			13:31																					
ZZZZZZ			13:33																					
ZZZZZZ			13:35																					
ZZZZZZ			13:36																					
CCV 240-142328/11-A			13:38																					
CCB 240-142328/12-A			13:40																					
ZZZZZZ			13:42																					
ZZZZZZ			13:43																					
ZZZZZZ			13:45																					
ZZZZZZ			13:47																					
ZZZZZZ			13:48																					
ZZZZZZ			13:50																					
ZZZZZZ			13:52																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/11/2014 12:43 End Date: 08/11/2014 15:59

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			13:54	
ZZZZZZ			13:55	
ZZZZZZ			13:57	
CCV 240-142328/11-A			13:59	
CCB 240-142328/12-A			14:00	
ZZZZZZ			14:02	
ZZZZZZ			14:03	
ZZZZZZ			14:05	
ZZZZZZ			14:08	
ZZZZZZ			14:09	
ZZZZZZ			14:11	
ZZZZZZ			14:13	
ZZZZZZ			14:14	
ZZZZZZ			14:16	
ZZZZZZ			14:17	
CCV 240-142328/11-A			14:19	
CCB 240-142328/12-A			14:21	
ZZZZZZ			14:22	
ZZZZZZ			14:24	
ZZZZZZ			14:25	
ZZZZZZ			14:27	
ZZZZZZ			14:29	
ZZZZZZ			14:30	
ZZZZZZ			14:32	
ZZZZZZ			14:34	
ZZZZZZ			14:36	
ZZZZZZ			14:37	
CCV 240-142328/11-A			14:39	
CCB 240-142328/12-A			14:41	
ZZZZZZ			14:43	
ZZZZZZ			14:45	
ZZZZZZ			14:46	
ZZZZZZ			14:49	
ZZZZZZ			14:51	
ZZZZZZ			14:52	
ZZZZZZ			14:54	
ZZZZZZ			14:56	
ZZZZZZ			14:58	
ZZZZZZ			14:59	
CCV 240-142328/11-A	1		15:01	X
CCB 240-142328/12-A	1		15:03	X
ZZZZZZ			15:04	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/11/2014 12:43 End Date: 08/11/2014 15:59

Lab Sample ID	D / F	Type	Time	Analytes: Hg
ZZZZZZ			15:06	
ZZZZZZ			15:08	
MB 240-142088/1-A	1	T	15:10	X
LCS 240-142088/2-A	1	T	15:12	X
ZZZZZZ			15:15	
240-40409-B-1-C MS	1	T	15:16	X
240-40409-B-1-D MSD	1	T	15:18	X
ZZZZZZ			15:20	
ZZZZZZ			15:21	
CCV 240-142328/11-A	1		15:23	X
CCB 240-142328/12-A	1		15:26	X
ZZZZZZ			15:27	
240-40408-6	1	D	15:29	X
ZZZZZZ			15:31	
240-40408-4	1	D	15:32	X
ZZZZZZ			15:34	
ZZZZZZ			15:36	
ZZZZZZ			15:39	
240-40408-1	1	D	15:40	X
240-40408-2	1	D	15:42	X
ZZZZZZ			15:43	
CCV 240-142328/11-A	1		15:45	X
CCB 240-142328/12-A	1		15:47	X
ZZZZZZ			15:48	
240-40408-5	1	D	15:50	X
240-40408-3	1	D	15:52	X
ZZZZZZ			15:54	
CCV 240-142328/11-A	1		15:57	X
CCB 240-142328/12-A	1		15:59	X

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/12/2014 09:40 End Date: 08/12/2014 14:55

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-142328/1-A			09:40	X																				
IC 240-142328/2-A			09:43	X																				
IC 240-142328/3-A			09:45	X																				
IC 240-142328/4-A			09:47	X																				
IC 240-142328/5-A			09:49	X																				
IC 240-142328/6-A			09:51	X																				
ICV 240-142328/7-A	1		10:02	X																				
ICB 240-142328/8-A	1		10:03	X																				
CRA 240-142328/9-A	1		10:05	X																				
CCVL 240-142328/10-A	1		11:18	X																				
CCB 240-142328/12-A			11:20																					
ZZZZZZ			11:22																					
ZZZZZZ			11:25																					
ZZZZZZ			11:27																					
ZZZZZZ			11:28																					
ZZZZZZ			11:30																					
ZZZZZZ			11:31																					
ZZZZZZ			11:33																					
ZZZZZZ			11:36																					
CCV 240-142328/11-A			11:42																					
CCB 240-142328/12-A			11:43																					
ZZZZZZ			11:45																					
ZZZZZZ			11:46																					
ZZZZZZ			11:48																					
ZZZZZZ			11:50																					
ZZZZZZ			11:51																					
ZZZZZZ			11:53																					
ZZZZZZ			11:55																					
ZZZZZZ			11:57																					
ZZZZZZ			11:58																					
ZZZZZZ			12:00																					
CCV 240-142328/11-A			12:02																					
CCB 240-142328/12-A			12:03																					
ZZZZZZ			12:05																					
ZZZZZZ			12:06																					
ZZZZZZ			12:09																					
ZZZZZZ			12:10																					
ZZZZZZ			12:12																					
ZZZZZZ			12:14																					
ZZZZZZ			12:15																					
ZZZZZZ			12:17																					
ZZZZZZ			12:18																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/12/2014 09:40 End Date: 08/12/2014 14:55

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			12:20	
CCV 240-142328/11-A	1		12:21	X
CCB 240-142328/12-A	1		12:23	X
ZZZZZZ			12:25	
ZZZZZZ			12:27	
ZZZZZZ			12:29	
ZZZZZZ			12:31	
MB 240-142277/1-A	1	T	12:33	X
LCS 240-142277/2-A	1	T	12:34	X
240-40408-7	1	D	12:36	X
240-40408-7 MS	1	D	12:38	X
240-40408-7 MSD	1	D	12:40	X
240-40408-16	1	D	12:42	X
CCV 240-142328/11-A	1		12:43	X
CCB 240-142328/12-A	1		12:45	X
ZZZZZZ			12:47	
240-40408-11	1	D	12:48	X
240-40408-13	1	D	12:50	X
240-40408-20	1	D	12:52	X
240-40408-9	1	D	12:54	X
240-40408-18	1	D	12:56	X
240-40408-19	1	D	12:57	X
ZZZZZZ			13:00	
240-40408-15	1	D	13:01	X
ZZZZZZ			13:03	
CCV 240-142328/11-A	1		13:05	X
CCB 240-142328/12-A	1		13:07	X
240-40408-8	1	D	13:09	X
240-40408-12	1	D	13:10	X
240-40408-10	1	D	13:12	X
240-40408-17	1	D	13:14	X
ZZZZZZ			13:16	
240-40408-22	1	D	13:18	X
240-40408-21	1	D	13:20	X
240-40408-14	1	D	13:22	X
MB 240-142288/1-A	1	T	13:24	X
LCS 240-142288/2-A	1	T	13:26	X
CCV 240-142328/11-A	1		13:28	X
CCB 240-142328/12-A	1		13:30	X
240-40408-23	1	D	13:32	X
240-40408-23 MS	1	D	13:33	X
240-40408-23 MSD	1	D	13:35	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/12/2014 09:40 End Date: 08/12/2014 14:55

Lab Sample ID	D/F	Type	Time	Analytes																				
				Hg																				
240-40408-28	1	D	13:37	X																				
240-40408-31	1	D	13:39	X																				
240-40408-33	1	D	13:41	X																				
240-40408-29	1	D	13:42	X																				
240-40408-36	1	D	13:44	X																				
240-40408-30	1	D	13:46	X																				
240-40408-32	1	D	13:48	X																				
CCV 240-142328/11-A	1		13:50	X																				
CCB 240-142328/12-A	1		13:51	X																				
ZZZZZZ			13:53																					
ZZZZZZ			13:54																					
ZZZZZZ			13:56																					
ZZZZZZ			13:58																					
ZZZZZZ			14:01																					
ZZZZZZ			14:03																					
ZZZZZZ			14:04																					
ZZZZZZ			14:06																					
ZZZZZZ			14:07																					
ZZZZZZ			14:10																					
ZZZZZZ			14:12																					
CCV 240-142328/11-A			14:13																					
CCB 240-142328/12-A			14:15																					
CCV 240-142328/11-A	1		14:30	X																				
CCB 240-142328/12-A	1		14:31	X																				
ZZZZZZ			14:33																					
240-40408-34	1	D	14:35	X																				
240-40408-35	1	D	14:38	X																				
ZZZZZZ			14:40																					
ZZZZZZ			14:42																					
ZZZZZZ			14:44																					
240-40408-25	1	D	14:46	X																				
240-40408-27	1	D	14:48	X																				
240-40408-26	1	D	14:49	X																				
240-40408-24	1	D	14:52	X																				
CCV 240-142328/11-A	1		14:54	X																				
CCB 240-142328/12-A	1		14:55	X																				

Prep Types

D = Dissolved

T = Total/NA

Sample Calc - Metals

Sample Report

Sample Table

Sample Name	240-40408-c-7-a MSA-SW 35C 050514
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10081214C.b Barium
Acq Date Time	2014-08-12T16:17:38-04:00 reported result: 18 mg/L
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.180	0.180	19.56	967	0.02	10000	
B	11	45	2	NoGas	236.911	236.911	1.05	796312	0.03	300	
Na	23	45	1	He	382087.899	382087.899	0.66	492050321	0.08	500000	
Mg	24	45	1	He	48358.010	48358.010	0.95	34440884	0.14	500000	
Al	27	45	1	He	-2.443	-2.443	-7.94	4528	-0.05	200000	
K	39	45	1	He	16504.815	16504.815	0.46	13455973	0.12	500000	
Ca	44	45	1	He	24350.623	24350.623	0.37	1036188	2.35	500000	
Ti	47	45	1	He	0.354	0.354	4.03	109	0.32	2500	
V	51	45	1	He	0.656	0.656	25.42	4640	0.01	10000	
Cr	52	45	1	He	0.368	0.368	4.75	4814	0.01	10000	
Mn	55	45	1	He	13.102	13.102	1.18	75651	0.02	10000	
Fe	56	45	1	He	11.564	11.564	3.89	90649	0.01	200000	
Co	59	45	1	He	0.181	0.181	11.89	2502	0.01	10000	
Ni	60	45	1	He	2.043	2.043	2.26	7393	0.03	10000	
Cu	63	45	1	He	10.426	10.426	0.41	105262	0.01	10000	
Zn	66	45	1	He	9.936	9.936	4.08	19180	0.05	10000	
As	75	115	1	He	1.314	1.314	1.06	2254	0.06	10000	
Se	78	115	1	He	0.802	0.802	3.38	257	0.31	10000	
Sr	88	45	1	He	355.617	355.617	0.86	2912566	0.01	10000	
Mo	95	103	1	He	1.603	1.603	5.06	7863	0.02	2000	
Ag	107	103	1	He	0.010	0.010	15.33	219	0.00	300	
Cd	111	115	1	He	0.301	0.301	14.63	886	0.03	4000	
Sn	118	115	1	He	0.975	0.975	18.63	6142	0.02	2000	
Sb	123	115	1	He	0.694	0.694	5.76	4929	0.01	300	
Ba	137	115	1	He	18.367	18.367	0.54	50884	0.04	10000	
W	182	159	1	He	0.669	0.669	4.24	10752	0.01	2500	
Tl	205	165	1	He	0.177	0.177	29.75	5248	0.00	5000	
Pb	208	165	1	He	0.612	0.612	3.05	25725	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	1720592	1.27	2536272	67.84	30	120	
Sc	45	1	He	1047602	1.09	1307283	80.14	30	120	
Sc	45	2	NoGas	13034251	1.74	14450613	90.20	30	120	
Rh	103	1	He	3488458	1.76	4286511	81.38	30	120	
In	115	1	He	1947945	0.56	2365218	82.36	30	120	
Tb	159	1	He	5005948	0.99	5622045	89.04	30	120	
Ho	165	1	He	5016026	0.44	5534184	90.64	30	120	
Bi	209	1	He	3293520	0.57	3784488	87.03	30	120	

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Sample Calc - Hardness

Client Sample ID: MSA-SW37A-080514 Lab Sample ID: 240-40408-1

Lab Name: TestAmerica Canton Job No.: 240-40408-1

SDG ID.:

Matrix: Water Date Sampled: 08/05/2014 12:12

Reporting Basis: WET Date Received: 08/06/2014 09:20

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	250	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	59	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	190	21		mg/L			1	SM 2340B

59 + 190 = 249 mg/L
Hardness

TETRA TECH

INTERNAL CORRESPONDENCE

TO: T. APANAVAGE **DATE:** OCTOBER 3, 2014

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

SUBJECT: INORGANIC DATA VALIDATION – HEXAVALENT CHROMIUM
LOCKHEED – MARTIN STATE AIRPORT (MSA)
SDG R1406011

SAMPLES: 36/Aqueous/Hexavalent Chromium

MSA-SW37A-080514	MSA-SW37B-080514	MSA-SW37C-080514	MSA-SW37D-080514
MSA-SW38A-080514	MSA-SW38B-080514	MSA-SW38C-080514	MSA-SW38D-080514
MSA-SW39A-080514	MSA-SW39B-080514	MSA-SW39C-080514	MSA-SW39D-080514
MSA-SW40A-080514	MSA-SW40B-080514	MSA-SW40C-080514	MSA-SW40D-080514
MSA-SW41A-080514	MSA-SW41B-080514	MSA-SW41C-080514	MSA-SW41D-080514
MSA-SW42A-080514	MSA-SW42B-080514	MSA-SW42C-080514	MSA-SW42D-080514
MSA-SW43A-080514	MSA-SW43B-080514	MSA-SW43C-080514	MSA-SW43D-080514
MSA-SW44A-080514	MSA-SW44B-080514	MSA-SW44C-080514	MSA-SW44D-080514
MSA-SW45A-080514	MSA-SW45B-080514	MSA-SW45C-080514	MSA-SW45D-080514

Overview

The sample set for Lockheed MSA, SDG R1406011 consisted of thirty-six (36) aqueous environmental samples. All samples were analyzed for hexavalent chromium. No field duplicate pair was included in the sample delivery group (SDG).

The samples were collected by Tetra Tech, Inc. on August 5, 2014 and analyzed by ALS Environmental. All analyses were conducted in accordance with EPA Method 218.6 analytical and reporting protocols.

The data contained in these SDGs were validated with regard to the following parameters: data completeness, holding times, initial/continuing calibrations, laboratory method blank results, laboratory control sample results, chromatographic resolution, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

The nondetected result for hexavalent chromium in sample MSA-SW39B-080514 was qualified as rejected (UR) because the sample was analyzed outside the 24 hour holding time. The laboratory properly preserved the sample upon receipt and analyzed the sample within 24 hours of sample receipt. The laboratory noted the sample were outside the client requested 24 hour hold time, but within the wastewater 28 day holding time. However, this is a surface water sample and the wastewater 28 day holding time does not apply.

Minor

The following samples were analyzed outside the 24 hour holding time: MSA-SW38A-080514, MSA-SW38B-080514, MSA-SW38C-080514, MSA-SW38D-080514, MSA-SW39A-080514, MSA-SW39C-080514, MSA-SW39D-080514, MSA-SW40A-080514, MSA-SW40B-080514, MSA-SW40C-080514, MSA-SW40D-080514, MSA-SW41A-080514, MSA-SW41B-080514, MSA-SW41C-080514, MSA-SW41D-080514, MSA-SW42A-080514, MSA-SW42B-080514, MSA-SW42C-080514, MSA-SW42D-080514, MSA-SW43A-080514, MSA-SW43B-080514, MSA-SW43C-080514, MSA-SW43D-080514, MSA-SW44A-080514, MSA-SW44B-080514, MSA-SW44C-080514, MSA-SW44D-080514, MSA-SW45A-080514, MSA-SW45B-080514, MSA-SW45C-080514, MSA-SW45D-080514. The laboratory properly

preserved the samples upon receipt and analyzed all samples within 24 hours of sample receipt. The laboratory noted the samples were outside the client requested 24 hour hold time, but within the wastewater 28 day holding time. However, these are surface water samples and the wastewater 28 day holding time does not apply. The detected results reported for hexavalent chromium were qualified as estimated, biased low, (J-).

Notes

All samples were analyzed at a 2X dilution.

Nondetected results were reported at the MRL.

Samples were filtered.

All samples were preserved to a pH of 9.5-9.7 within 24 hours of sample receipt.

Executive Summary

Laboratory Performance: The 24 hour holding time specified in EPA Method 218.6 was exceeded for several samples.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review" (January 2010) and EPA Method 218.6. The text of this report has been formulated to address only those problem 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

Data Validation Qualifier Codes:

VQL – Validation Qualifier
QLCD – Validation Qualifier Code

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (e.g. % 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 = GFAA PDS-GFAA MSA's r < 0.995 / ICP PDS Recovery Noncompliance
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 (e.g. base-line drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = % Difference between columns/detectors >25% 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 sigma deviation is greater than sample activity

PROJ_NO: 06183	NSAMPLE	MSA-SW37A-080514			MSA-SW37B-080514			MSA-SW37C-080514			MSA-SW37D-080514		
SDG: R1406011	LAB_ID	R1406011-001			R1406011-002			R1406011-003			R1406011-004		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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			0.06			0.079			0.106		

PROJ_NO: 06183	NSAMPLE	MSA-SW38A-080514			MSA-SW38B-080514			MSA-SW38C-080514			MSA-SW38D-080514		
SDG: R1406011	LAB_ID	R1406011-005			R1406011-006			R1406011-007			R1406011-008		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.085	J-	H	0.102	J-	H	0.066	J-	H	0.096	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW39A-080514			MSA-SW39B-080514			MSA-SW39C-080514			MSA-SW39D-080514		
SDG: R1406011	LAB_ID	R1406011-009			R1406011-010			R1406011-011			R1406011-012		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.077	J-	H	0.04	UR	H	0.062	J-	H	0.073	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW40A-080514			MSA-SW40B-080514			MSA-SW40C-080514			MSA-SW40D-080514		
SDG: R1406011	LAB_ID	R1406011-013			R1406011-014			R1406011-015			R1406011-016		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.085	J-	H	0.059	J-	H	0.082	J-	H	0.086	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW41A-080514			MSA-SW41B-080514			MSA-SW41C-080514			MSA-SW41D-080514		
SDG: R1406011	LAB_ID	R1406011-017			R1406011-018			R1406011-019			R1406011-020		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.055	J-	H	0.067	J-	H	0.062	J-	H	0.077	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW42A-080514			MSA-SW42B-080514			MSA-SW42C-080514			MSA-SW42D-080514		
SDG: R1406011	LAB_ID	R1406011-021			R1406011-022			R1406011-023			R1406011-024		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.074	J-	H	0.085	J-	H	0.079	J-	H	0.091	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW43A-080514			MSA-SW43B-080514			MSA-SW43C-080514			MSA-SW43D-080514		
SDG: R1406011	LAB_ID	R1406011-025			R1406011-026			R1406011-027			R1406011-028		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.062	J-	H	0.06	J-	H	0.096	J-	H	0.077	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW44A-080514			MSA-SW44B-080514			MSA-SW44C-080514			MSA-SW44D-080514		
SDG: R1406011	LAB_ID	R1406011-029			R1406011-030			R1406011-031			R1406011-032		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.08	J-	H	0.079	J-	H	0.079	J-	H	0.078	J-	H

PROJ_NO: 06183	NSAMPLE	MSA-SW45A-080514			MSA-SW45B-080514			MSA-SW45C-080514			MSA-SW45D-080514		
SDG: R1406011	LAB_ID	R1406011-033			R1406011-034			R1406011-035			R1406011-036		
FRACTION: MISC	SAMP_DATE	8/5/2014			8/5/2014			8/5/2014			8/5/2014		
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		0.086	J-	H	0.062	J-	H	0.074	J-	H	0.084	J-	H

Appendix B

Results as Reported by the Laboratory

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1212
Date Received: 8/ 6/14

Sample Name: MSA-SW37A-080514
Lab Code: R1406011-001

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.052**		µg/L	0.040	0.028	2	NA	8/6/14 11:58	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1217
Date Received: 8/ 6/14

Sample Name: MSA-SW37B-080514
Lab Code: R1406011-002

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.060		µg/L	0.040	0.028	2	NA	8/6/14 12:08	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1221
Date Received: 8/ 6/14

Sample Name: MSA-SW37C-080514
Lab Code: R1406011-003

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.079		µg/L	0.040	0.028	2	NA	8/6/14 12:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1225
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW37D-080514		
Lab Code:	R1406011-004	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.106**		µg/L	0.040	0.028	2	NA	8/6/14 12:28	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1121
Date Received: 8/ 6/14

Sample Name: MSA-SW38A-080514
Lab Code: R1406011-005

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.085**		µg/L	0.040	0.028	2	NA	8/6/14 12:58	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1125
Date Received: 8/ 6/14

Sample Name: MSA-SW38B-080514
Lab Code: R1406011-006

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.102**		µg/L	0.040	0.028	2	NA	8/6/14 13:08	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1128
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW38C-080514		
Lab Code:	R1406011-007	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.066**		µg/L	0.040	0.028	2	NA	8/6/14 13:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1132
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW38D-080514		
Lab Code:	R1406011-008	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.096**		µg/L	0.040	0.028	2	NA	8/6/14 13:49	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 0949
Date Received: 8/ 6/14

Sample Name: MSA-SW39A-080514
Lab Code: R1406011-009

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.077**		µg/L	0.040	0.028	2	NA	8/6/14 14:18	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 0956
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW39B-080514		
Lab Code:	R1406011-010	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	0.028	2	NA	8/6/14 14:28	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1000
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW39C-080514		
Lab Code:	R1406011-011	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.062**		µg/L	0.040	0.028	2	NA	8/6/14 14:39	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1004
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW39D-080514		
Lab Code:	R1406011-012	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.073**		µg/L	0.040	0.028	2	NA	8/6/14 14:49	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1137
Date Received: 8/ 6/14

Sample Name: MSA-SW40A-080514
Lab Code: R1406011-013

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.085**		µg/L	0.040	0.028	2	NA	8/6/14 15:18	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1141
Date Received: 8/ 6/14

Sample Name: MSA-SW40B-080514
Lab Code: R1406011-014

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.059**		µg/L	0.040	0.028	2	NA	8/6/14 15:50	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1145
Date Received: 8/ 6/14

Sample Name: MSA-SW40C-080514
Lab Code: R1406011-015

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.082**		µg/L	0.040	0.028	2	NA	8/6/14 16:00	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1148
Date Received: 8/ 6/14

Sample Name: MSA-SW40D-080514
Lab Code: R1406011-016

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.086**		µg/L	0.040	0.028	2	NA	8/6/14 16:10	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1105
Date Received: 8/ 6/14

Sample Name: MSA-SW41A-080514
Lab Code: R1406011-017

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.055**		µg/L	0.040	0.028	2	NA	8/6/14 16:40	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1109
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW41B-080514		
Lab Code:	R1406011-018	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.067**		µg/L	0.040	0.028	2	NA	8/6/14 16:50	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1113
Date Received: 8/ 6/14

Sample Name: MSA-SW41C-080514
Lab Code: R1406011-019

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.062**		µg/L	0.040	0.028	2	NA	8/6/14 17:00	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1116
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW41D-080514		
Lab Code:	R1406011-020	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.077		µg/L	0.040	0.028	2	NA	8/6/14 17:10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1155
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW42A-080514		
Lab Code:	R1406011-021	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.074**		µg/L	0.040	0.028	2	NA	8/6/14 17:53	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1158
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW42B-080514		
Lab Code:	R1406011-022	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.085**		µg/L	0.040	0.028	2	NA	8/6/14 18:03	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/1121C06183	**Date Collected:**	8/ 5/14 1202
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW42C-080514		
Lab Code:	R1406011-023	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.079**		µg/L	0.040	0.028	2	NA	8/6/14 18:13	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1206
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW42D-080514		
Lab Code:	R1406011-024	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.091**		µg/L	0.040	0.028	2	NA	8/6/14 18:23	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/1121C06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1047
Date Received: 8/ 6/14

Sample Name: MSA-SW43A-080514
Lab Code: R1406011-025

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.062**		µg/L	0.040	0.028	2	NA	8/6/14 18:34	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1051
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW43B-080514		
Lab Code:	R1406011-026	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.060**		µg/L	0.040	0.028	2	NA	8/6/14 18:44	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1055
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW43C-080514		
Lab Code:	R1406011-027	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.096**		µg/L	0.040	0.028	2	NA	8/6/14 18:54	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1100
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW43D-080514		
Lab Code:	R1406011-028	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.077**		µg/L	0.040	0.028	2	NA	8/6/14 19:04	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1032
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW44A-080514		
Lab Code:	R1406011-029	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.080**		µg/L	0.040	0.028	2	NA	8/6/14 19:14	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1035
Date Received: 8/ 6/14

Sample Name: MSA-SW44B-080514
Lab Code: R1406011-030

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.079		µg/L	0.040	0.028	2	NA	8/6/14 19:25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1038
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW44C-080514		
Lab Code:	R1406011-031	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.079**		µg/L	0.040	0.028	2	NA	8/6/14 19:55	

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1042
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW44D-080514		
Lab Code:	R1406011-032	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.078**		µg/L	0.040	0.028	2	NA	8/6/14 20:05	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	8/ 5/14 1010
Sample Matrix:	Water	**Date Received:**	8/ 6/14
Sample Name:	MSA-SW45A-080514		
Lab Code:	R1406011-033	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.086**		µg/L	0.040	0.028	2	NA	8/6/14 20:15	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1015
Date Received: 8/ 6/14

Sample Name: MSA-SW45B-080514
Lab Code: R1406011-034

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.062**		µg/L	0.040	0.028	2	NA	8/6/14 20:26	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1019
Date Received: 8/ 6/14

Sample Name: MSA-SW45C-080514
Lab Code: R1406011-035

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.074**		µg/L	0.040	0.028	2	NA	8/6/14 20:36	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: 8/ 5/14 1022
Date Received: 8/ 6/14

Sample Name: MSA-SW45D-080514
Lab Code: R1406011-036

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.084**		µg/L	0.040	0.028	2	NA	8/6/14 20:46	

Appendix C

Support Documentation

Sample	Time collected on 8/5/14	Time analyzed on 8/6/14	Hours over 24 hour hold time
MSA-SW37A-080514	12:12	11:58	
MSA-SW37B-080514	12:17	12:08	
MSA-SW37C-080514	12:21	12:18	
MSA-SW37D-080514	12:25	12:28	0:03
MSA-SW38A-080514	11:21	12:58	1:37
MSA-SW38B-080514	11:25	13:08	1:43
MSA-SW38C-080514	11:28	13:18	1:50
MSA-SW38D-080514	11:32	13:49	2:17
MSA-SW39A-080514	9:49	14:18	4:29
MSA-SW39B-080514	9:54	14:28	4:34
MSA-SW39C-080514	10:00	14:39	4:39
MSA-SW39D-080514	10:04	14:49	4:45
MSA-SW40A-080514	11:37	15:18	3:41
MSA-SW40B-080514	11:41	15:50	4:09
MSA-SW40C-080514	11:45	16:00	4:15
MSA-SW40D-080514	11:48	16:10	4:22
MSA-SW41A-080514	11:05	16:40	5:35
MSA-SW41B-080514	11:09	16:50	5:41
MSA-SW41C-080514	11:13	17:00	5:47
MSA-SW41D-080514	11:16	17:10	5:54
MSA-SW42A-080514	11:55	17:53	5:58
MSA-SW42B-080514	11:58	18:03	6:05
MSA-SW42C-080514	12:02	18:13	6:11
MSA-SW42D-080514	12:06	18:23	6:17
MSA-SW43A-080514	10:47	18:34	7:47
MSA-SW43B-080514	10:51	18:44	7:53
MSA-SW43C-080514	10:55	18:54	7:59
MSA-SW43D-080514	11:00	19:04	8:04
MSA-SW44A-080514	10:32	19:14	8:42
MSA-SW44B-080514	10:35	19:25	8:50
MSA-SW44C-080514	10:38	19:55	9:17
MSA-SW44D-080514	10:42	20:05	9:23
MSA-SW45A-080514	10:10	20:15	10:05
MSA-SW45B-080514	10:15	20:26	10:11
MSA-SW45C-080514	10:19	20:36	10:17
MSA-SW45D-080514	10:22	20:46	10:24

HOLDTIME

SDG R1406011

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-SW39A-080514	R1406011-009	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW37A-080514	R1406011-001	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW40D-080514	R1406011-016	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW40C-080514	R1406011-015	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW40B-080514	R1406011-014	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW40A-080514	R1406011-013	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW39D-080514	R1406011-012	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW41B-080514	R1406011-018	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW39B-080514	R1406011-010	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW41C-080514	R1406011-019	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW38D-080514	R1406011-008	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW38C-080514	R1406011-007	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW38B-080514	R1406011-006	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW38A-080514	R1406011-005	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW37D-080514	R1406011-004	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-SW37C-080514	R1406011-003	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW37B-080514	R1406011-002	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW39C-080514	R1406011-011	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW43C-080514	R1406011-027	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW45C-080514	R1406011-035	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW45B-080514	R1406011-034	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW45A-080514	R1406011-033	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW44D-080514	R1406011-032	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW44C-080514	R1406011-031	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW44B-080514	R1406011-030	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW41A-080514	R1406011-017	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW43D-080514	R1406011-028	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW45D-080514	R1406011-036	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW43B-080514	R1406011-026	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW43A-080514	R1406011-025	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW42D-080514	R1406011-024	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW42C-080514	R1406011-023	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW42B-080514	R1406011-022	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-SW42A-080514	R1406011-021	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW41D-080514	R1406011-020	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1
CR6	UG/L	MSA-SW44A-080514	R1406011-029	NM	08/05/2014	08/06/2014	08/06/2014	1	0	1

August 13, 2014

Service Request No: R1406011

Ms. Samantha Brenner
Tetra Tech NUS,Inc.
20251 Century Blvd. Ste. 200
Germantown, MD 20874-7114

Laboratory Results for: MSA Surface Water Frog Mortar Creek/112IC06183

Dear Ms. Brenner:

Enclosed are the results of the sample(s) submitted to our laboratory on August 6, 2014. For your reference, these analyses have been assigned our service request number **R1406011**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7473. You may also contact me via email at Deb.Patton@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Deb Patton
Project Manager

CC: Amy Thomson

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
ALS GROUP USA, CORP. Part of the ALS Group An ALS Limited Company

www.alsglobal.com
RIGHT SOLUTIONS RIGHT PARTNER

CASE NARRATIVE

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1406011
Project:	MSA Surface Water	**Project Number:**	112IC06183
Sample Matrix:	Water	**Date Received:**	8/6/14

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 8/5/14 and received at ALS in good condition at a cooler temperature of 4.0°C as noted on the cooler receipt and preservation check form. The sample preservation was checked upon receipt and samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CLP Batching sheets for a cross-reference between Client ID and ALS Job # and analyses requested. Sample ID were changed per client request to match bottle ID's.

Hexavalent Chromium Analysis – 218.6

Thirty-six water samples were analyzed for Dissolved CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

Note: Several samples were analyzed outside of the client requested 24 hours holding time but within method specified holding time of 28 days. All samples were analyzed on the same day they were received.

All the initial and continuing calibration criteria of 95 – 105 % were met.

The Blank Spike (LCS) recovery was within QC limits.

The Laboratory Blank associated with these samples was free of contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

Rochester

565 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 Annavage	Site Contact: Tony Annavage	Date: 8/5/14	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	1 of 3 COCs
10251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 1121C06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks 24hr			Sampler: T. Mills
Project Name: MSA Surface Water Sampling	☐ 1 week hold time			
Site: MSA Frog Mortar Creek	☐ 2 days			
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW37A-080514	8/5/14	1212	SW	Water	1		x	
MSA-SW37B-080514	8/5/14	1217	SW	Water	1		x	
MSA-SW37C-080514	8/5/14	1221	SW	Water	1		x	
MSA-SW37D-080514	8/5/14	1225	SW	Water	1		x	
MSA-SW38A-080514	8/5/14	1121	SW	Water	1		x	
MSA-SW38B-080514	8/5/14	1125	SW	Water	1		x	
MSA-SW38C-080514	8/5/14	1128	SW	Water	1		x	
MSA-SW38D-080514	8/5/14	1132	SW	Water	1		x	
MSA-SW39A-080514	8/5/14	0949	SW	Water	1		x	
MSA-SW39B-080514	8/5/14	0956	SW	Water	1		x	
MSA-SW39C-080514	8/5/14	1000	SW	Water	1		x	
MSA-SW39D-080514	8/5/14	1004	SW	Water	1		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
(X) 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 (X) Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements & Comments: **Samples must be analyzed within 24 hours of sample time.**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/5/14 1500		ALS	8-6-14 07:50
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

R1406011 5
Tetra Tech NUS,Inc.
MSA Surface Water Frog Mortar Creek

Rochester

565 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 Ananavage	Site Contact: Tony Ananavage	Date: 8/5/14	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	2 of 3 COCs
10251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC06183
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 24 hour HOLD TIME			Sampler: TM/MS
Project Name: MSA Surface Water Sampling				
Site: MSA Frog Mortar Creek				
PO #				

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW40A-080514	8/5/14	1137	SW	Water	1		x	
MSA-SW40B-080514	8/5/14	1141	SW	Water	1		x	
MSA-SW40C-080514	8/5/14	1145	SW	Water	1		x	
MSA-SW40D-080514	8/5/14	1148	SW	Water	1		x	
MSA-SW41A-080514	8/5/14	1105	SW	Water	1		x	
MSA-SW41B-080514	8/5/14	1109	SW	Water	1		x	
MSA-SW41C-080514	8/5/14	1113	SW	Water	1		x	
MSA-SW41D-080514	8/5/14	1116	SW	Water	1		x	
MSA-SW42A-080514	8/5/14	1155	SW	Water	1		x	
MSA-SW42B-080514	8/5/14	1158	SW	Water	1		x	
MSA-SW42C-080514	8/5/14	1202	SW	Water	1		x	
MSA-SW42D-080514	8/5/14	1206	SW	Water	1		x	

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.**

	Company:	Date/Time:	Received by:	Company:	Date/Time:
1 Relinquished by:	Tetra Tech	8/5/14 1500		ALS	8-6-14 07:50
2 Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
3 Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Rochester

565 Jefferson Road, Building 300, Suite 360
:ochester, NY 14623
hone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/5/14	COC No:
etra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	3 of 3 COCs
0251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC06183
ermantown, MD 20874	Calendar (C) or Work Days (W)			SDG No.
301) 528-3021 Phone	TAT if different from Below: STANDARD			
301) 528-3000 FAX	☐ 2 weeks			Sampler: J. Mills
roject Name: MSA Surface Water Sampling	☐ 1 week			
ite: MSA Frog Mortar Creek	☐ 2 days			
O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW43A-080514	8/5/14	1047	SW	Water	1		x	
MSA-SW43B-080514	8/5/14	1051	SW	Water	1		x	
MSA-SW43C-080514	8/5/14	1055	SW	Water	1		x	
MSA-SW43D-080514	8/5/14	1100	SW	Water	1		x	
MSA-SW44A-080514	8/5/14	1032	SW	Water	1		x	
MSA-SW44B-080514	8/5/14	1035	SW	Water	1		x	
MSA-SW44C-080514	8/5/14	1038	SW	Water	1		x	
MSA-SW44D-080514	8/5/14	1042	SW	Water	1		x	
MSA-SW45A-080514	8/5/14	1010	SW	Water	1		x	
MSA-SW45B-080514	8/5/14	1015	SW	Water	1		x	
MSA-SW45C-080514	8/5/14	1019	SW	Water	1		x	
MSA-SW45D-080514	8/5/14	1022	SW	Water	1		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification
(X) 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 (X) Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements & Comments: **Samples must be analyzed within 24 hours of sample time.**

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Tetra Tech	8/5/14 1630		ALS	8-6-14 07:50
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number R14-6011

Cooler received on 8-6-14 by: RE COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y	N
2	Custody papers properly completed (ink, signed)?	Y	N
3	Did all bottles arrive in good condition (unbroken)?	Y	N
4	Circle: Wet Ice Dry Ice Gel packs present?	Y	N

5a	Perchlorate samples have required headspace?	Y	N	NA
5b	Did VOA vials, Alk,or Sulfide have sig* bubbles?	Y	N	NA
6	Where did the bottles originate?	ALS/ROC	CLIENT	
7	Soil VOA received as: Bulk Encore 5035set			NA

8. Temperature Readings Date: 8-6-14 Time: 07:56 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	3.8°						
Correction Factor (°C)	+0.2						
Corrected Temp (°C)	4.0°						
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: SMO by RE on 8-6-14 at 8-00

5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: _____

Cooler Breakdown: Date: 8/6/14 Time: 1225 by: DW

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**						

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 071414-2AA0

Other Comments:

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client: Tetra Tech NUS, Inc. **Service Request:** R1406011

Project: MSA Surface Water Frog Mortar Creek/112IC06183

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL **Units:** ppb

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	405371	RQ1409192-09	8/6/14 11:20	0.500	0.508	102	95 - 105
CCV2	405371	RQ1409192-10	8/6/14 13:28	0.500	0.512	102	95 - 105
CCV3	405371	RQ1409192-11	8/6/14 15:28	0.500	0.498	100	95 - 105
CCV4	405372	RQ1409202-01	8/6/14 15:28	0.500	0.498	100	95 - 105
CCV5	405371	RQ1409192-12	8/6/14 17:31	0.500	0.499	100	95 - 105
CCV6	405372	RQ1409202-02	8/6/14 17:31	0.500	0.499	100	95 - 105
CCV7	405372	RQ1409202-03	8/6/14 19:35	0.500	0.493	99	95 - 105
CCV8	405372	RQ1409202-04	8/6/14 21:07	0.500	0.476	95	95 - 105

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183

Service Request: R1406011

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	405371	RQ1409192-13	8/6/14 11:30	0.014	0.020	0.020	U
CCB2	405371	RQ1409192-14	8/6/14 13:38	0.014	0.020	0.020	U
CCB3	405371	RQ1409192-15	8/6/14 15:39	0.014	0.020	0.020	U
CCB4	405372	RQ1409202-05	8/6/14 15:39	0.014	0.020	0.020	U
CCB5	405371	RQ1409192-16	8/6/14 17:42	0.014	0.020	0.020	U
CCB6	405372	RQ1409202-06	8/6/14 17:42	0.014	0.020	0.020	U
CCB7	405372	RQ1409202-07	8/6/14 19:45	0.014	0.020	0.020	U
CCB8	405372	RQ1409202-08	8/6/14 21:17	0.014	0.020	0.020	U

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1406011
Project:	MSA Surface Water Frog Mortar Creek/112IC06183	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1406011-MB1	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.014	1	NA	8/6/14 11:30	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: R1406011-MB2

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	0.014	1	NA	8/6/14 15:39	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Analyzed: 8/ 6/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1406011-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.187	0.200	93	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Frog Mortar Creek/112IC06183
Sample Matrix: Water

Service Request: R1406011
Date Analyzed: 8/ 6/14

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1406011-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.196	0.200	98	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
8/5/14 0935	D11295	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/4/14 1325	Yes No Field	—	—	9.544	—	8/5/14 1210	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	D11293	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/4/14 1320	Yes No Field	—	—	9.686	—	8/5/14 1211	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	D11294	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/4/14 1320	Yes No Field	—	—	9.672	—	8/5/14 1212	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	D11338	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/4/14 1240	Yes No Field	—	—	9.683	—	8/5/14 1213	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	D11337	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/4/14 1240	Yes No Field	—	—	9.652	—	8/5/14 1215	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	DLW 8/5/14
8/5/14	KH-8033	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/1/14 0700	Yes No Field	—	—	8.31	9.31	DLW 8/5/14 2326	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	~~WC1126~~ WC1400130
8/6/14 0750	6011-003 SW37C	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1221	Yes No Field	mellen R0BS61183	—	6.812	9.694	8/6/14 0828	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1400130
	6011-022 SW42D	7199 ~~218.6 RL~~ 218.6 LL 218.7	Water Drinking Water	8/5/14 1206	Yes No Field		—	8.001	9.622	8/6/14 0830	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1400130

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

00067

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
8/6/14 0750	6011-002 SW37B	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1217	Yes No Field	miller RUBS61183	—	7.621	9.533	8/6/14 0831	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-001 SW37A	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1212	Yes No Field		—	7.600	9.506	8/6/14 0832	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-005 SW38A	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1121	Yes No Field		—	7.812	9.499	8/6/14 0834	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	8/6/14 SW38AC 6011-007	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1124	Yes No Field		—	7.721	9.538	8/6/14 0835	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-008 SW38D	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1132	Yes No Field		—	7.612	9.523	8/6/14 0836	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-018 SW41D	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1116	Yes No Field		—	7.702	9.525	8/6/14 0838	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-012 SW39D	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1004	Yes No Field		—	7.559	9.510	8/6/14 0840	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-021 SW42C	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1202	Yes No Field		—	7.673	9.544	8/6/14 0841	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

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SMO Cr6+ preservation log r1 1/10/13

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
8/6/14 0750	6011-017 SW41C	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1113	Yes No Field	miller RDBS61183	—	7.922	9.532	[illegible] 8/6/14 0844	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-016 SW40D	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1148	Yes No Field		—	7.814	9.549	[illegible] 8/6/14 0845	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-009 SW39A	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 0949	Yes No Field		—	7.687	9.527	[illegible] 8/6/14 0846	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-029 SW44A	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1032	Yes No Field		—	7.584	9.541	[illegible] 8/6/14 0848	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-031 SW44C	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1038	Yes No Field		—	7.542	9.562	[illegible] 8/6/14 0850	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-030 SW44B	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1035	Yes No Field		—	7.601	9.558	[illegible] 8/6/14 0851	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-010 SW39B	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 0956	Yes No Field		—	7.600	9.563	[illegible] 8/6/14 0852	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-032 SW44D	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/5/14 1042	Yes No Field		—	7.541	9.546	[illegible] 8/6/14 0853	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
8/6/14 0760	6011-016 SW41A	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1105	Yes No Field	miller RCB561183	–	7.443	9.549	8/6/14 0855	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-017 SW41B	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1109	Yes No Field		–	7.599	9.583	8/6/14 0856	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-021 SW42A	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1155	Yes No Field		–	7.613	9.568	8/6/14 0857	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-011 SW39C	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1000	Yes No Field		–	7.524	9.537	8/6/14 0859	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-006 SW38B	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1125	Yes No Field		–	7.700	9.548	8/6/14 0900	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-022 SW42B	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1158	Yes No Field		–	7.557	9.550	8/6/14 0901	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-034 SW45B	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1015	Yes No Field		–	7.463	9.535	8/6/14 0902	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D
	6011-004 SW37D	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1225	Yes No Field		–	7.498	9.540	8/6/14 0904	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC140013D

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
8/6/14 0750	6011-036 SW45D	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1022	(Yes) No Field	millex RDBS61183	–	7.510	9.561	R 8/6/14 0905	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130
	6011-035 SW45C	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1019	(Yes) No Field		–	7.470	9.548	R 8/6/14 0906	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130
	6011-013 SW40A	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1137	(Yes) No Field		–	7.598	9.532	R 8/6/14 0908	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130
	6011-014 SW40B	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1141	(Yes) No Field		–	7.448	9.535	R 8/6/14 0910	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130
	6011-015 SW40C	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1145	(Yes) No Field		–	7.529	9.535	R 8/6/14 0911	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400131
	6011-033 SW45A	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1010	(Yes) No Field		–	7.768	9.536	R 8/6/14 0913	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130
	6011-027 SW43C	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1055	(Yes) No Field		–	7.720	9.534	R 8/6/14 0915	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130
	6011-025 SW43A	7199 ~~218.6 RD~~ ~~218.6 LD~~ 218.7	(Water) Drinking Water	8/5/14 1047	(Yes) No Field		–	7.551	9.537	R 8/6/14 0917	(Buffer) 10%H2SO4 10%NH4OH NH4OH(conc)	4XC1400130

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
8/6/14 0750	6011-028 SW43D	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1100	Yes No Field	miller ROBS61183	—	7.472	9.528	8/6/14 0918	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1400130
↓	6011-026 SW4 3B	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1051	Yes No Field	↓	—	7.581	9.531	8/6/14 0920	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1400130
8/6/14 0940	5983-006	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1055	Yes No Field	—	—	9.299	—	8/6/14 1635	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	-007	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1045	Yes No Field	—	—	9.279	—	8/6/14 1636	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	-008	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1400	Yes No Field	—	—	9.425	—	8/6/14 1637	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	-009	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1100	Yes No Field	—	—	9.190	—	8/6/14 1638	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
	-010	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1015	Yes No Field	—	—	9.442	—	8/6/14 1639	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	
↓	-011	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/5/14 1315	Yes No Field	—	—	9.363	—	8/6/14 1640	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 112IC06183	Batch Complete: Yes		Date Revised:
Submission: R1406011	Diskette Requested: No		Date Due: 8/27/14
Client: Tetra Tech NUS, Inc.	Date: 8/7/14		Protocol: MCAWW
Client Rep: DPATTON	Custody Seal: Present/Absent:		Shipping No.:
Project: MSA Surface Water Frog Mortar (	Chain of Custody: Present/Absent:		SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1406011-001	MSA-SW37A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-002	MSA-SW37B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-003	MSA-SW37C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-004	MSA-SW37D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-005	MSA-SW38A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-006	MSA-SW38B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-007	MSA-SW38C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-008	MSA-SW38D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-009	MSA-SW39A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-010	MSA-SW39B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-011	MSA-SW39C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-012	MSA-SW39D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-013	MSA-SW40A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-014	MSA-SW40B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-015	MSA-SW40C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-016	MSA-SW40D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-017	MSA-SW41A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-018	MSA-SW41B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-019	MSA-SW41C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-020	MSA-SW41D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-021	MSA-SW42A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-022	MSA-SW42B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-023	MSA-SW42C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-024	MSA-SW42D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-025	MSA-SW43A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-026	MSA-SW43B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-027	MSA-SW43C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-028	MSA-SW43D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-029	MSA-SW44A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-030	MSA-SW44B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-031	MSA-SW44C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-032	MSA-SW44D-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-033	MSA-SW45A-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-034	MSA-SW45B-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-035	MSA-SW45C-080514	Water	218.6 LL	8/5/14	8/6/14			
R1406011-036	MSA-SW45D-080514	Water	218.6 LL	8/5/14	8/6/14			

Folder Comments:

08-06-14 IC#8 218.6LL Analyst: CWoods Pipets: FRED BARNES FEB

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-080614LL	06/08/14 10:08	1.0	218.6 LL
2	STANDARD 2	Calibration Standard	02	8-080614LL	06/08/14 10:18	1.0	218.6 LL
3	STANDARD 3	Calibration Standard	03	8-080614LL	06/08/14 10:29	1.0	218.6 LL
4	STANDARD 4	Calibration Standard	04	8-080614LL	06/08/14 10:39	1.0	218.6 LL
5	STANDARD 5	Calibration Standard	05	8-080614LL	06/08/14 10:49	1.0	218.6 LL
6	STANDARD 6	Calibration Standard	06	8-080614LL	06/08/14 10:59	1.0	218.6 LL
7	STANDARD 7	Calibration Standard	07	8-080614LL	06/08/14 11:09	1.0	218.6 LL
8	ICV	Unknown		8-080614LL	06/08/14 11:20	1.0	218.6 LL
9	ICB	Unknown		8-080614LL	06/08/14 11:30	1.0	218.6 LL
10	LCS	Unknown		8-080614LL	06/08/14 11:41	1.0	218.6 LL
11	R1406011-001	Unknown		8-080614LL	06/08/14 11:58	2.0	218.6 LL
12	R1406011-002	Unknown		8-080614LL	06/08/14 12:08	2.0	218.6 LL
13	R1406011-003	Unknown		8-080614LL	06/08/14 12:18	2.0	218.6 LL
14	R1406011-004	Unknown		8-080614LL	06/08/14 12:28	2.0	218.6 LL
15	R1406011-004 MS	Unknown		8-080614LL	06/08/14 12:38	2.0	218.6 LL
16	R1406011-004 MSD	Unknown		8-080614LL	06/08/14 12:49	2.0	218.6 LL
17	R1406011-005	Unknown		8-080614LL	06/08/14 12:58	2.0	218.6 LL
18	R1406011-006	Unknown		8-080614LL	06/08/14 13:08	2.0	218.6 LL
19	R1406011-007	Unknown		8-080614LL	06/08/14 13:18	2.0	218.6 LL
20	CCV	Unknown		8-080614LL	06/08/14 13:28	1.0	218.6 LL
21	CCB	Unknown		8-080614LL	06/08/14 13:38	1.0	218.6 LL
22	R1406011-008	Unknown		8-080614LL	06/08/14 13:49	2.0	218.6 LL
23	R1406011-008 MS	Unknown		8-080614LL	06/08/14 13:59	2.0	218.6 LL
24	R1406011-008 MSD	Unknown		8-080614LL	06/08/14 14:09	2.0	218.6 LL
25	R1406011-009	Unknown		8-080614LL	06/08/14 14:18	2.0	218.6 LL
26	R1406011-010	Unknown		8-080614LL	06/08/14 14:28	2.0	218.6 LL
27	R1406011-011	Unknown		8-080614LL	06/08/14 14:39	2.0	218.6 LL
28	R1406011-012	Unknown		8-080614LL	06/08/14 14:49	2.0	218.6 LL
29	R1406011-012 MS	Unknown		8-080614LL	06/08/14 14:59	2.0	218.6 LL
30	R1406011-012 MSD	Unknown		8-080614LL	06/08/14 15:09	2.0	218.6 LL
31	R1406011-013	Unknown		8-080614LL	06/08/14 15:18	2.0	218.6 LL
32	CCV	Unknown		8-080614LL	06/08/14 15:28	1.0	218.6 LL
33	CCB	Unknown		8-080614LL	06/08/14 15:39	1.0	218.6 LL
34	R1406011-014	Unknown		8-080614LL	06/08/14 15:50	2.0	218.6 LL
35	R1406011-015	Unknown		8-080614LL	06/08/14 16:00	2.0	218.6 LL

R1001: 1 copy

Reviewed & Approved
By: CK
Date: 8/7/14

5000

36	R1406011-016	Unknown	8-080614LL	06/08/14 16:10	2.0	218.6 LL
37	R1406011-016 MS	Unknown	8-080614LL	06/08/14 16:20	2.0	218.6 LL
38	R1406011-016 MSD	Unknown	8-080614LL	06/08/14 16:31	2.0	218.6 LL
39	R1406011-017	Unknown	8-080614LL	06/08/14 16:40	2.0	218.6 LL
40	R1406011-018	Unknown	8-080614LL	06/08/14 16:50	2.0	218.6 LL
41	R1406011-019	Unknown	8-080614LL	06/08/14 17:00	2.0	218.6 LL
42	R1406011-020	Unknown	8-080614LL	06/08/14 17:10	2.0	218.6 LL
43	LCS	Unknown	8-080614LL	06/08/14 17:20	1.0	218.6 LL
44	CCV	Unknown	8-080614LL	06/08/14 17:31	1.0	218.6 LL
45	CCB	Unknown	8-080614LL	06/08/14 17:42	1.0	218.6 LL
46	R1406011-021	Unknown	8-080614LL	06/08/14 17:53	2.0	218.6 LL
47	R1406011-022	Unknown	8-080614LL	06/08/14 18:03	2.0	218.6 LL
48	R1406011-023	Unknown	8-080614LL	06/08/14 18:13	2.0	218.6 LL
49	R1406011-024	Unknown	8-080614LL	06/08/14 18:23	2.0	218.6 LL
50	R1406011-025	Unknown	8-080614LL	06/08/14 18:34	2.0	218.6 LL
51	R1406011-026	Unknown	8-080614LL	06/08/14 18:44	2.0	218.6 LL
52	R1406011-027	Unknown	8-080614LL	06/08/14 18:54	2.0	218.6 LL
53	R1406011-028	Unknown	8-080614LL	06/08/14 19:04	2.0	218.6 LL
54	R1406011-029	Unknown	8-080614LL	06/08/14 19:14	2.0	218.6 LL
55	R1406011-030	Unknown	8-080614LL	06/08/14 19:25	2.0	218.6 LL
56	CCV	Unknown	8-080614LL	06/08/14 19:35	1.0	218.6 LL
57	CCB	Unknown	8-080614LL	06/08/14 19:45	1.0	218.6 LL
58	R1406011-031	Unknown	8-080614LL	06/08/14 19:55	2.0	218.6 LL
59	R1406011-032	Unknown	8-080614LL	06/08/14 20:05	2.0	218.6 LL
60	R1406011-033	Unknown	8-080614LL	06/08/14 20:15	2.0	218.6 LL
61	R1406011-034	Unknown	8-080614LL	06/08/14 20:26	2.0	218.6 LL
62	R1406011-035	Unknown	8-080614LL	06/08/14 20:36	2.0	218.6 LL
63	R1406011-036	Unknown	8-080614LL	06/08/14 20:46	2.0	218.6 LL
64	FILTER BLANK	Unknown	8-080614LL	06/08/14 20:56	1.0	218.6 LL
65	CCV	Unknown	8-080614LL	06/08/14 21:07	1.0	218.6 LL
66	CCB	Unknown	8-080614LL	06/08/14 21:17	1.0	218.6 LL

99999

MSA-SW38A-080314 result: 0.085 mg/L

Sample Calc 0.04 ppb × 2 dilution = 0.08 µg/L

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 405371 **Method/Testcode:** 218.6 LL/Cr6 D LL

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1409192-09	Chromium, Hexavalent, Dissolved	CCV		Water	0.51 ppb	10 mL	0.508 ppb	1					8/6/14 11:20:00	N	IV
RQ1409192-13	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.014	0.020			8/6/14 11:30:00	N	IV
RQ1409192-17	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.014	0.020			8/6/14 11:30:00	N	IV
RQ1409192-18	Chromium, Hexavalent, Dissolved	LCS		Water	0.19 ppb	10 mL	0.187 µg/L	1	0.014	0.020	93		8/6/14 11:41:00	N	IV
R1406011-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.052 µg/L	2	0.028	0.040			8/6/14 11:58:00	N	IV
R1406011-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.060 µg/L	2	0.028	0.040			8/6/14 12:08:00	N	IV
R1406011-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.079 µg/L	2	0.028	0.040			8/6/14 12:18:00	N	IV
R1406011-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.106 µg/L	2	0.028	0.040			8/6/14 12:28:00	N	IV
RQ1409192-01	Chromium, Hexavalent, Dissolved	MS	R1406011-004	Water	0.24 ppb	10 mL	0.483 µg/L	2	0.028	0.040	94		8/6/14 12:38:00	N	IV
RQ1409192-02	Chromium, Hexavalent, Dissolved	DMS	R1406011-004	Water	0.25 ppb	10 mL	0.496 µg/L	2	0.028	0.040	98	3	8/6/14 12:49:00	N	IV
R1406011-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.085 µg/L	2	0.028	0.040			8/6/14 12:58:00	N	IV
R1406011-006	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.102 µg/L	2	0.028	0.040			8/6/14 13:08:00	N	IV
R1406011-007	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.066 µg/L	2	0.028	0.040			8/6/14 13:18:00	N	IV
RQ1409192-10	Chromium, Hexavalent, Dissolved	CCV		Water	0.51 ppb	10 mL	0.512 ppb	1					8/6/14 13:28:00	N	IV
RQ1409192-14	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.014	0.020			8/6/14 13:38:00	N	IV
R1406011-008	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.096 µg/L	2	0.028	0.040			8/6/14 13:49:00	N	IV
RQ1409192-03	Chromium, Hexavalent, Dissolved	MS	R1406011-008	Water	0.23 ppb	10 mL	0.454 µg/L	2	0.028	0.040	90		8/6/14 13:59:00	N	IV
RQ1409192-04	Chromium, Hexavalent, Dissolved	DMS	R1406011-008	Water	0.26 ppb	10 mL	0.517 µg/L	2	0.028	0.040	105	13	8/6/14 14:09:00	N	IV
R1406011-009	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.077 µg/L	2	0.028	0.040			8/6/14 14:18:00	N	IV
R1406011-010	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 ppb	10 mL	0.040 µg/L U	2	0.028	0.040			8/6/14 14:28:00	N	IV
R1406011-011	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.062 µg/L	2	0.028	0.040			8/6/14 14:39:00	N	IV
R1406011-012	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.073 µg/L	2	0.028	0.040			8/6/14 14:49:00	N	IV
RQ1409192-05	Chromium, Hexavalent, Dissolved	MS	R1406011-012	Water	0.23 ppb	10 mL	0.468 µg/L	2	0.028	0.040	99		8/6/14 14:59:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

APPENDIX C—CHEMICAL RESULTS DATA TABLE

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-080514 20140805	EL-SW01B EL-SW01B-080514 20140805	EL-SW01C EL-SW01C-080514 20140805	EL-SW01D EL-SW01D-080514 20140805	MSA-SW-37A MSA-SW37A-080514 20140805	MSA-SW-37B MSA-SW37B-080514 20140805
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 UJ	0.18 UJ	0.18 UJ	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 UJ	0.43 UJ	0.43 UJ	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 UJ	0.67 UJ	0.67 UJ	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 UJ	0.24 UJ	0.24 UJ	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 UJ	0.22 UJ	0.22 UJ	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 UJ	0.16 UJ	0.16 UJ	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
2-BUTANONE	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 UJ	0.41 UJ	0.41 UJ	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 UJ	0.32 UJ	0.32 UJ	0.32 U	0.32 U
ACETONE	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 U	1.1 U
BENZENE	0.13 U	0.13 U	0.13 U	0.14 J	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 UJ	0.41 UJ	0.41 UJ	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.13 UJ
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-080514 20140805	EL-SW01B EL-SW01B-080514 20140805	EL-SW01C EL-SW01C-080514 20140805	EL-SW01D EL-SW01D-080514 20140805	MSA-SW-37A MSA-SW37A-080514 20140805	MSA-SW-37B MSA-SW37B-080514 20140805
CHLOROETHANE	0.29 U	0.29 UJ	0.29 UJ	0.29 UJ	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.22 J	0.27 J	0.21 J	0.23 J	0.57 J	0.3 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 UJ	0.14 UJ	0.14 UJ	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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	0.17 U	0.17 UJ	0.17 UJ	0.17 UJ	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 UJ	0.12 UJ	0.12 UJ	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.28 J	0.14 U	0.29 J	0.28 J	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 UJ	3.9 UJ	3.9 UJ	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.15 J	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.28 J	0.14 U	0.29 J	0.28 J	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 UJ	0.19 UJ	0.19 UJ	0.19 U	0.19 U
TRICHLOROETHENE	0.4 J	0.5 J	0.49 J	0.42 J	0.59 J	0.6 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 UJ	0.19 UJ	0.19 UJ	0.19 U	0.19 U
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.48 J	0.22 U
DISSOLVED METALS (UG/L)						
ANTIMONY	NA	NA	NA	NA	0.42 U	0.32 U
ARSENIC	NA	NA	NA	NA	1.5 J	1.5 J
BARIUM	NA	NA	NA	NA	18	17
BERYLLIUM	NA	NA	NA	NA	0.31 U	0.2 U
CADMIUM	NA	NA	NA	NA	0.31 J	0.23 J
CHROMIUM	NA	NA	NA	NA	0.34 J	0.26 J

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-080514 20140805	EL-SW01B EL-SW01B-080514 20140805	EL-SW01C EL-SW01C-080514 20140805	EL-SW01D EL-SW01D-080514 20140805	MSA-SW-37A MSA-SW37A-080514 20140805	MSA-SW-37B MSA-SW37B-080514 20140805
COBALT	NA	NA	NA	NA	0.17 J	0.091 J
COPPER	NA	NA	NA	NA	6.8 U	7 U
LEAD	NA	NA	NA	NA	0.44 U	0.28 U
MERCURY	NA	NA	NA	NA	0.12 U	0.12 U
MOLYBDENUM	NA	NA	NA	NA	1.6 J	1.5 J
NICKEL	NA	NA	NA	NA	1.5 J	1.9 J
SELENIUM	NA	NA	NA	NA	1.1 U	1.1 U
SILVER	NA	NA	NA	NA	0.017 J	0.0083 U
THALLIUM	NA	NA	NA	NA	0.4 U	0.4 U
TUNGSTEN	NA	NA	NA	NA	0.73 U	0.96 U
VANADIUM	NA	NA	NA	NA	0.49 J	0.39 J
ZINC	NA	NA	NA	NA	10 U	8.6 U
MISCELLANEOUS PARAMETERS (MG/L)						
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	59	59
HARDNESS AS CACO3	NA	NA	NA	NA	250	250
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	190	190
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	0.052	0.06

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-37C MSA-SW37C-080514 20140805	MSA-SW-37D MSA-SW37D-080514 20140805	MSA-SW-38A MSA-SW38A-080514 20140805	MSA-SW-38B MSA-SW38B-080514 20140805	MSA-SW-38C MSA-SW38C-080514 20140805	MSA-SW-38D MSA-SW38D-080514 20140805
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-37C MSA-SW37C-080514 20140805	MSA-SW-37D MSA-SW37D-080514 20140805	MSA-SW-38A MSA-SW38A-080514 20140805	MSA-SW-38B MSA-SW38B-080514 20140805	MSA-SW-38C MSA-SW38C-080514 20140805	MSA-SW-38D MSA-SW38D-080514 20140805
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.31 J	0.34 J	7.6	0.42 J	0.44 J	0.62 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.51 J	0.62 J	3	0.7 J	0.82 J	1.3
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	0.22 U	0.22 U	3	0.22 U	0.22 U	0.29 J
DISSOLVED METALS (UG/L)						
ANTIMONY	0.29 U	0.3 U	0.29 U	0.29 U	0.69 U	0.61 U
ARSENIC	1.4 J	1.5 J	1.4 J	1.4 J	1.3 J	1.4 J
BARIUM	17	17	17	17	18	19
BERYLLIUM	0.14 U	0.12 U	0.096 U	0.086 U	0.18 U	0.32 U
CADMIUM	0.2 J	0.2 J	0.46 J	0.19 J	0.3 J	0.33 J
CHROMIUM	0.34 J	0.25 J	0.51 J	0.23 J	0.37 U	0.36 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-37C MSA-SW37C-080514 20140805	MSA-SW-37D MSA-SW37D-080514 20140805	MSA-SW-38A MSA-SW38A-080514 20140805	MSA-SW-38B MSA-SW38B-080514 20140805	MSA-SW-38C MSA-SW38C-080514 20140805	MSA-SW-38D MSA-SW38D-080514 20140805
COBALT	0.077 J	0.081 J	0.47 J	0.11 J	0.18 J	0.22 J
COPPER	7.1 U	7.3	6.1 U	6.8 U	10 U	11 U
LEAD	0.24 U	0.24 U	0.22 U	0.21 U	0.61 U	0.57 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UJ	0.12 UJ
MOLYBDENUM	1.5 J	1.7 J	1.5 J	1.5 J	1.6 J	1.6 J
NICKEL	1.7 J	1.8 J	2.2	1.9 J	2	2
SELENIUM	0.82 U	0.8 U	0.86 U	0.73 U	0.8 U	0.99 U
SILVER	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.01 J	0.016 J
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	1.1 U	1.1 U	1.1 U	1.2 U	0.67 U	1.3 U
VANADIUM	0.3 J	0.36 J	0.36 J	0.31 J	0.66 J	0.76 J
ZINC	8.7 U	10 U	8.6 U	7.5 U	9.9 U	8.9 U
MISCELLANEOUS PARAMETERS (MG/L)						
CALCIUM HARDNESS AS CACO3	57	60	57	57	61	61
HARDNESS AS CACO3	240	250	240	250	260	260
MAGNESIUM HARDNESS AS CACO3	180	190	190	190	200	200
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.079	0.106	0.085 J-	0.102 J-	0.066 J-	0.096 J-

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-39A MSA-SW39A-080514 20140805	MSA-SW-39B MSA-SW39B-080514 20140805	MSA-SW-39C MSA-SW39C-080514 20140805	MSA-SW-39D MSA-SW39D-080514 20140805	MSA-SW-40A MSA-SW40A-080514 20140805	MSA-SW-40B MSA-SW40B-080514 20140805
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.3 J
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-39A MSA-SW39A-080514 20140805	MSA-SW-39B MSA-SW39B-080514 20140805	MSA-SW-39C MSA-SW39C-080514 20140805	MSA-SW-39D MSA-SW39D-080514 20140805	MSA-SW-40A MSA-SW40A-080514 20140805	MSA-SW-40B MSA-SW40B-080514 20140805
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.23 J	0.19 J	1.7	6
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.28 J	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.28 J	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.21 J	0.21 J	0.37 J	0.34 J	2.3	30
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.71	1.3
DISSOLVED METALS (UG/L)						
ANTIMONY	0.47 U	0.48 U	0.44 U	0.38 U	0.4 U	0.39 U
ARSENIC	1.5 J	1.3 J	1.4 J	1.5 J	1.5 J	1.5 J
BARIUM	18	18	18	18	18	17
BERYLLIUM	0.23 U	0.15 U	0.11 U	0.11 U	0.073 U	0.074 U
CADMIUM	0.1 J	0.15 J	0.17 J	0.14 J	0.23 J	0.28 J
CHROMIUM	0.28 U	0.31 U	0.28 U	0.3 U	0.32 U	0.28 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-39A MSA-SW39A-080514 20140805	MSA-SW-39B MSA-SW39B-080514 20140805	MSA-SW-39C MSA-SW39C-080514 20140805	MSA-SW-39D MSA-SW39D-080514 20140805	MSA-SW-40A MSA-SW40A-080514 20140805	MSA-SW-40B MSA-SW40B-080514 20140805
COBALT	0.14 J	0.12 J	0.093 J	0.058 J	0.23 J	0.23 J
COPPER	9 U	10 U	10 U	11 U	10 U	11 U
LEAD	0.42 U	0.37 U	0.33 U	0.29 U	0.25 U	0.25 U
MERCURY	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ
MOLYBDENUM	1.6 J	1.6 J	1.6 J	1.7 J	1.6 J	1.5 J
NICKEL	1.7 J	1.9 J	1.9 J	1.9 J	2.1	1.9 J
SELENIUM	0.86 U	0.91 U	0.98 U	0.82 U	0.86 U	0.63 U
SILVER	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	1.1 U	0.95 U	1.1 U	1.2 U	1.3 U	1.4 U
VANADIUM	0.36 J	0.61 J	0.15 U	0.15 U	0.19 J	0.2 J
ZINC	4.2 U	6.8 U	8.1 U	7.1 U	9.7 U	8 U
MISCELLANEOUS PARAMETERS (MG/L)						
CALCIUM HARDNESS AS CACO3	62	62	61	63	60	59
HARDNESS AS CACO3	270	270	260	270	260	250
MAGNESIUM HARDNESS AS CACO3	210	210	200	200	200	190
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.077 J-	0.04 UR	0.062 J-	0.073 J-	0.085 J-	0.059 J-

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-40C MSA-SW40C-080514 20140805	MSA-SW-40D MSA-SW40D-080514 20140805	MSA-SW-41A MSA-SW41A-080514 20140805	MSA-SW-41B MSA-SW41B-080514 20140805	MSA-SW-41C MSA-SW41C-080514 20140805	MSA-SW-41D MSA-SW41D-080514 20140805
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 UJ	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 UJ	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 UJ	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 UJ	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 UJ	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 UJ	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 UJ	0.57 UJ	0.57 UJ
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 UJ	0.99 UJ	0.99 UJ
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 UJ	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 U	0.32 U
ACETONE	1.1 U	1.1 U	1.1 U	1.1 U	1.1 UJ	1.1 UJ
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 UJ	0.41 U	0.41 U
CARBON DISULFIDE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-40C MSA-SW40C-080514 20140805	MSA-SW-40D MSA-SW40D-080514 20140805	MSA-SW-41A MSA-SW41A-080514 20140805	MSA-SW-41B MSA-SW41B-080514 20140805	MSA-SW-41C MSA-SW41C-080514 20140805	MSA-SW-41D MSA-SW41D-080514 20140805
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 UJ	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.56 J	1.1	2	1	1.1	0.24 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 UJ	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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	0.17 U	0.17 U	0.17 U	0.17 UJ	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 UJ	0.24 UJ	0.24 UJ
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 UJ	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	3.9 U	3.9 UJ	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 UJ	0.19 U	0.19 U
TRICHLOROETHENE	1	4	2.2	1.3	1.6	0.48 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 UJ	0.19 U	0.19 U
VINYL CHLORIDE	0.22 U	0.41 J	0.78	0.3 J	0.39 J	0.22 U
DISSOLVED METALS (UG/L)						
ANTIMONY	0.37 U	0.38 U	0.37 U	0.33 U	0.44 U	0.35 U
ARSENIC	1.5 J	1.5 J	1.5 J	1.4 J	1.5 J	1.4 J
BARIUM	18	18	18	17	18	18
BERYLLIUM	0.06 U	0.069 U	0.069 U	0.081 U	0.064 U	0.045 U
CADMIUM	0.21 J	0.19 J	0.23 J	0.19 J	0.26 J	0.17 J
CHROMIUM	0.26 U	0.29 U	0.28 U	0.26 U	0.35 U	0.29 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-40C MSA-SW40C-080514 20140805	MSA-SW-40D MSA-SW40D-080514 20140805	MSA-SW-41A MSA-SW41A-080514 20140805	MSA-SW-41B MSA-SW41B-080514 20140805	MSA-SW-41C MSA-SW41C-080514 20140805	MSA-SW-41D MSA-SW41D-080514 20140805
COBALT	0.097 J	0.11 J	0.25 J	0.18 J	0.22 J	0.068 J
COPPER	10 U	11 U	9.4 U	9.3 U	9.6 U	28
LEAD	0.23 U	0.23 U	0.24 U	0.21 U	0.32 U	0.22 U
MERCURY	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ
MOLYBDENUM	1.6 J	1.6 J	1.5 J	1.6 J	1.7 J	1.6 J
NICKEL	1.8 J	2	1.9 J	1.8 J	2	2
SELENIUM	0.84 U	0.68 U	0.79 U	0.68 U	0.73 U	0.55 J
SILVER	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U	0.0083 U
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	1.4 U	1.5 U	1.4 U	1.4 U	1.3 U	1.2 U
VANADIUM	0.15 U	0.16 J	0.28 J	0.28 J	0.28 J	0.32 J
ZINC	8 U	8.2 U	7.8 U	6.7 U	9.2 U	8.9 U
MISCELLANEOUS PARAMETERS (MG/L)						
CALCIUM HARDNESS AS CACO3	59	62	57	57	59	63
HARDNESS AS CACO3	250	260	250	240	250	260
MAGNESIUM HARDNESS AS CACO3	190	200	190	190	190	200
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.082 J-	0.086 J-	0.055 J-	0.067 J-	0.062 J-	0.077 J-

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-42A MSA-SW42A-080514 20140805	MSA-SW-42B MSA-SW42B-080514 20140805	MSA-SW-42C MSA-SW42C-080514 20140805	MSA-SW-42D MSA-SW42D-080514 20140805	MSA-SW-43A MSA-SW43A-080514 20140805	MSA-SW-43B MSA-SW43B-080514 20140805
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ
2-CHLOROETHYL VINYL ETHER	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

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Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-42A MSA-SW42A-080514 20140805	MSA-SW-42B MSA-SW42B-080514 20140805	MSA-SW-42C MSA-SW42C-080514 20140805	MSA-SW-42D MSA-SW42D-080514 20140805	MSA-SW-43A MSA-SW43A-080514 20140805	MSA-SW-43B MSA-SW43B-080514 20140805
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.53 J	0.46 J	0.44 J	0.48 J	0.68 J	0.49 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.93 J	0.76 J	0.71 J	0.7 J	0.96 J	0.88 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	0.22 J	0.28 J	0.23 J	0.22 J	0.22 U	0.22 U
DISSOLVED METALS (UG/L)						
ANTIMONY	0.35 U	0.34 U	0.25 J	0.32 J	0.24 J	0.2 J
ARSENIC	1.4 J	1.4 J	1.3 U	1.4 U	1.5 U	1.5 U
BARIUM	17	17	18	18	19	18
BERYLLIUM	0.046 U	0.043 U	0.064 U	0.14 U	0.13 U	0.076 U
CADMIUM	0.2 J	0.19 J	0.25 J	0.37 J	0.25 J	0.22 U
CHROMIUM	0.27 U	0.26 U	0.38 J	0.38 J	0.39 J	0.37 J

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-42A MSA-SW42A-080514 20140805	MSA-SW-42B MSA-SW42B-080514 20140805	MSA-SW-42C MSA-SW42C-080514 20140805	MSA-SW-42D MSA-SW42D-080514 20140805	MSA-SW-43A MSA-SW43A-080514 20140805	MSA-SW-43B MSA-SW43B-080514 20140805
COBALT	0.11 J	0.12 J	0.14 U	0.16 U	0.43 J	0.088 U
COPPER	9.5 U	9 U	7.1	6.6	6.5	6.5
LEAD	0.22 U	0.2 U	0.38 J	0.31 J	0.23 J	0.2 J
MERCURY	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ
MOLYBDENUM	1.5 J	1.7 J	1.6 J	1.7 J	1.7 J	1.6 J
NICKEL	1.9 J	1.7 J	2.1	2	2.5	2
SELENIUM	0.61 J	0.6 J	0.4 J	0.66 J	0.67 J	0.59 J
SILVER	0.0083 U	0.0083 U	0.011 U	0.016 U	0.009 U	0.01 U
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	1.3 U	1.3 U	0.86 U	1.3 U	1.3 U	1.3 U
VANADIUM	0.19 J	0.15 U	0.82 J	0.68 J	0.33 J	0.17 J
ZINC	13 U	7.4 U	8.2 J	6.1 J	6.3 J	4.7 J
MISCELLANEOUS PARAMETERS (MG/L)						
CALCIUM HARDNESS AS CACO3	58	57	65	61	66	63
HARDNESS AS CACO3	240	230	280	260	280	270
MAGNESIUM HARDNESS AS CACO3	180	180	210	200	210	210
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.074 J-	0.085 J-	0.079 J-	0.091 J-	0.062 J-	0.06 J-

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-43C MSA-SW43C-080514 20140805	MSA-SW-43D MSA-SW43D-080514 20140805	MSA-SW-44A MSA-SW44A-080514 20140805	MSA-SW-44B MSA-SW44B-080514 20140805	MSA-SW-44C MSA-SW44C-080514 20140805	MSA-SW-44D MSA-SW44D-080514 20140805
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ
2-CHLOROETHYL VINYL ETHER	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-43C MSA-SW43C-080514 20140805	MSA-SW-43D MSA-SW43D-080514 20140805	MSA-SW-44A MSA-SW44A-080514 20140805	MSA-SW-44B MSA-SW44B-080514 20140805	MSA-SW-44C MSA-SW44C-080514 20140805	MSA-SW-44D MSA-SW44D-080514 20140805
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	1.1	0.85 J	0.23 J	0.33 J	0.27 J	0.33 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 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	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	1.6	1.4	0.39 J	0.64 J	0.55 J	0.7 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	0.37 J	0.31 J	0.22 U	0.22 U	0.22 U	0.22 U
DISSOLVED METALS (UG/L)						
ANTIMONY	0.2 J	0.19 J	0.19 J	0.35 U	0.36 U	0.35 U
ARSENIC	1.5 U	1.6 U	1.5 U	1.1 U	1.2 U	1.2 U
BARIUM	18	18	18	18 J	17 J	17
BERYLLIUM	0.079 U	0.071 U	0.054 U	0.031 UJ	0.031 UJ	0.031 UJ
CADMIUM	0.21 U	0.19 U	0.17 U	0.18 U	0.17 U	0.15 U
CHROMIUM	0.34 J	0.34 J	0.48 J	0.32 J	0.35 J	0.42 J

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-43C MSA-SW43C-080514 20140805	MSA-SW-43D MSA-SW43D-080514 20140805	MSA-SW-44A MSA-SW44A-080514 20140805	MSA-SW-44B MSA-SW44B-080514 20140805	MSA-SW-44C MSA-SW44C-080514 20140805	MSA-SW-44D MSA-SW44D-080514 20140805
COBALT	0.1 U	0.078 U	0.14 U	0.067 U	0.055 U	0.056 U
COPPER	7.1	7.7	6.3	7.4	6.8	6.9
LEAD	0.16 J	0.17 J	0.14 J	0.14 U	0.14 U	0.14 U
MERCURY	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ
MOLYBDENUM	1.6 J	1.7 J	1.6 J	1.8 J	1.5 J	1.4 J
NICKEL	2	2	2.1	1.9 J	2	1.9 J
SELENIUM	0.53 J	0.69 J	0.53 J	0.34 UJ	0.34 UJ	0.34 U
SILVER	0.009 U	0.0083 U	0.0083 U	0.0083 UJ	0.0083 UJ	0.0083 U
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	1.2 U	1.3 U	1.2 U	0.14 U	0.1 U	0.085 U
VANADIUM	0.19 J	0.4 J	0.32 J	0.89 J	0.85 J	0.85 J
ZINC	6.7 J	7 J	7.1 J	3.3 J	4.3 J	5.7 J
MISCELLANEOUS PARAMETERS (MG/L)						
CALCIUM HARDNESS AS CACO3	63	65	63	59	59	59
HARDNESS AS CACO3	270	280	270	280	280	270
MAGNESIUM HARDNESS AS CACO3	210	210	210	220	220	220
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.096 J-	0.077 J-	0.08 J-	0.079 J-	0.079 J-	0.078 J-

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-45A MSA-SW45A-080514 20140805	MSA-SW-45B MSA-SW45B-080514 20140805	MSA-SW-45C MSA-SW45C-080514 20140805	MSA-SW-45D MSA-SW45D-080514 20140805	QC-TRIP BLANK TB-080514 20140805
VOLATILES (UG/L)					
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 UJ
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 UJ
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 UJ
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 UJ
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 UJ
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 UJ
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ
2-BUTANONE	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ	0.57 UJ
2-CHLOROETHYL VINYL ETHER	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ	0.99 UJ
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 UJ
ACETONE	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.2 J
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-45A MSA-SW45A-080514 20140805	MSA-SW-45B MSA-SW45B-080514 20140805	MSA-SW-45C MSA-SW45C-080514 20140805	MSA-SW-45D MSA-SW45D-080514 20140805	QC-TRIP BLANK TB-080514 20140805
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.24 J	0.25 J	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U	0.17 UJ
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U	3.1
NAPHTHALENE	0.24 UJ	0.24 UJ	0.24 UJ	0.24 UJ	0.43 J
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 UJ
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 U	3.9 U	3.9 U	3.9 U	4.6 J
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ
TRICHLOROETHENE	0.38 J	0.42 J	0.29 J	0.25 J	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
DISSOLVED METALS (UG/L)					
ANTIMONY	0.37 U	0.31 U	0.34 U	0.35 U	NA
ARSENIC	1.1 U	1.1 U	1.2 U	1.1 U	NA
BARIUM	17	17	18	18	NA
BERYLLIUM	0.031 UJ	0.031 UJ	0.031 UJ	0.031 UJ	NA
CADMIUM	0.11 U	0.12 U	0.13 U	0.15 U	NA
CHROMIUM	0.35 J	0.37 J	0.32 J	0.32 J	NA

Table C-1

Chemical Results for Surface Water Samples-August 2014
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-45A MSA-SW45A-080514 20140805	MSA-SW-45B MSA-SW45B-080514 20140805	MSA-SW-45C MSA-SW45C-080514 20140805	MSA-SW-45D MSA-SW45D-080514 20140805	QC-TRIP BLANK TB-080514 20140805
COBALT	0.085 U	0.1 J	0.063 U	0.059 U	NA
COPPER	5.1	5.6	6	6.4	NA
LEAD	0.14 U	0.14 U	0.14 U	0.14 U	NA
MERCURY	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	NA
MOLYBDENUM	1.4 J	1.4 J	1.4 J	1.4 J	NA
NICKEL	1.8 J	1.8 J	1.9 J	1.9 J	NA
SELENIUM	0.34 U	0.34 U	0.34 U	0.34 U	NA
SILVER	0.0083 U	0.0083 U	0.0083 U	0.0083 U	NA
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	NA
TUNGSTEN	0.082 U	0.085 U	0.077 U	0.068 U	NA
VANADIUM	0.89 J	0.92 J	0.86 J	0.91 J	NA
ZINC	2.1 U	3 J	2.9 J	3.4 J	NA
MISCELLANEOUS PARAMETERS (MG/L)					
CALCIUM HARDNESS AS CACO3	60	62	61	60	NA
HARDNESS AS CACO3	290	280	280	290	NA
MAGNESIUM HARDNESS AS CACO3	230	220	220	230	NA
MISCELLANEOUS PARAMETERS (UG/L)					
HEXAVALENT CHROMIUM	0.086 J-	0.062 J-	0.074 J-	0.084 J-	NA

CACO3 = calcium carbonate
EL - Edwards Lane
J Positive result is considered estimated as a result of technical noncompliance.
J- Positive result is considered estimated as a result of technical noncompliance. Result is biases low.
MG/L - milligrams per liter (i.e., parts per million)
MSA - Martin State Airport
NA - not analyzed
SW - surface water
U - Not detected at the detection limit shown left of the letter.
UG/L - micrograms per liter (i.e., parts per billion)
UJ -The analyte was not detected. However, the quantitation or detection limit may be inaccurate or imprecise.
UR - Not detected at the detection limit shown left of the letter. Result is not reliable.