Technical Memorandum: August 2013 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
COC	chain(s) of custody
cVOC	chlorinated volatile organic compound
DRA	Dump Road Area
EL	Edwards Lane
GIS	geographic information system
IDW	investigation-derived waste
Lockheed Martin	Lockheed Martin Corporation
MDE	Maryland Department of the Environment
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
RI	remedial investigation
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 to detail work conducted according to the *2013 Surface Water Sampling Work Plan* (Tetra Tech, 2013a) for the Dump Road Area (DRA) at Martin State Airport (MSA) in Middle River, Maryland (see Figure 1-1). This technical memorandum presents the analytical results for surface water samples collected from Frog Mortar Creek on August 15, 2013. The sampling objectives were to:

- provide additional surface-water quality data to determine the concentrations and spatial distributions of volatile organic compounds (VOCs) and other chemicals of potential concern in Frog Mortar Creek that may emanate from a groundwater plume at the Dump Road Area of Martin State Airport
- provide surface-water quality data from Frog Mortar Creek during a summer month when increased recreational use and biological activity occur in the creek

The results of this sampling are screened against human-health and ecological water-quality criteria in this memorandum. 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 for 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 references where summaries of previous Frog Mortar Creek investigations are available for review.

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

Section 4—Results: Presents the investigation findings.

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

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

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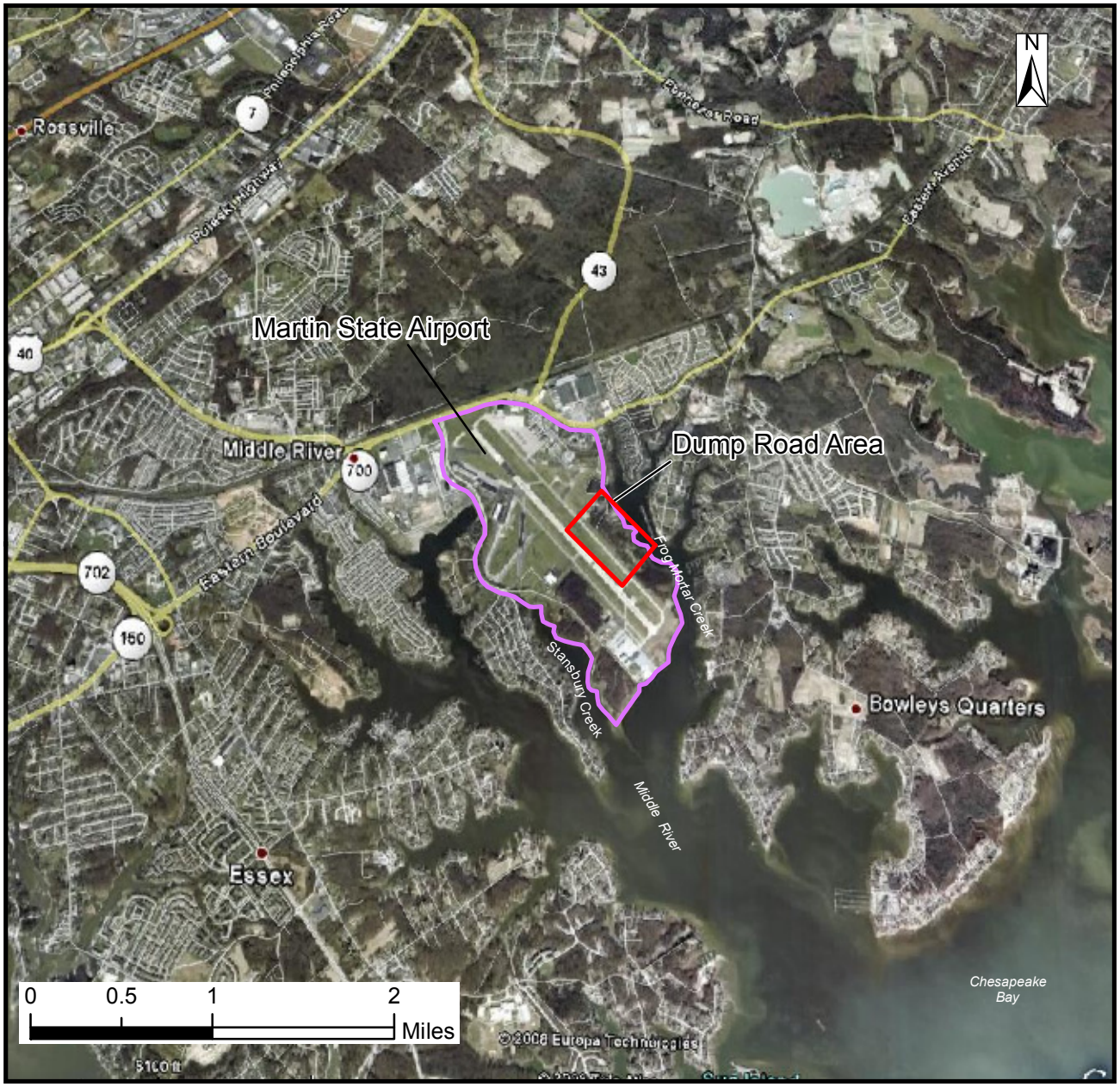

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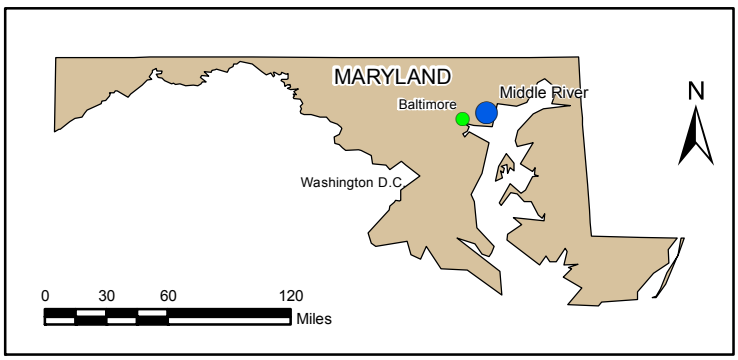

FIGURE 1-1

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

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

DATE MODIFIED:	CREATED BY:
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TETRA TECH

Section 2
Site Background and Previous Investigations

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland. It is bounded by Frog Mortar Creek to the east and Stansbury Creek to the west (Figure 2-1), both of which are tidal tributaries of Chesapeake Bay. The area under investigation is Frog Mortar Creek, which is east of and adjacent to the Dump Road Area (DRA) site at MSA (Figures 2-1 and 2-2).

Detailed environmental studies have been conducted at the DRA since the early 1990s, when the Maryland Aviation Administration removed drums discovered near Taxiway Tango in 1991 (Figure 2-2). The DRA currently consists mostly of open meadows, mowed grass, and heavily wooded areas; however, the DRA 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 for military aircraft operations. The airport runway is used by the Maryland Air National Guard as well as 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 prior dumping and backfilling. The primary constituents that have been detected in DRA groundwater at concentrations exceeding state groundwater standards are as follows:

- the chlorinated VOCs (cVOCs) trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC)
- petroleum-related VOCs such as benzene, toluene, ethylbenzene, and xylenes (BTEX)
- several metals

Frog Mortar Creek is hydraulically downgradient of the DRA and directly 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 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 Frog Mortar Creek studies conducted from 1997–2012, and details of the area's physical setting, land use, physiography, and surface and subsurface conditions (i.e., soils, hydrology, and geology) are in the *2012 Surface Water Sampling Report for Frog Mortar Creek* (Tetra Tech, 2013*b*), and are not repeated herein.

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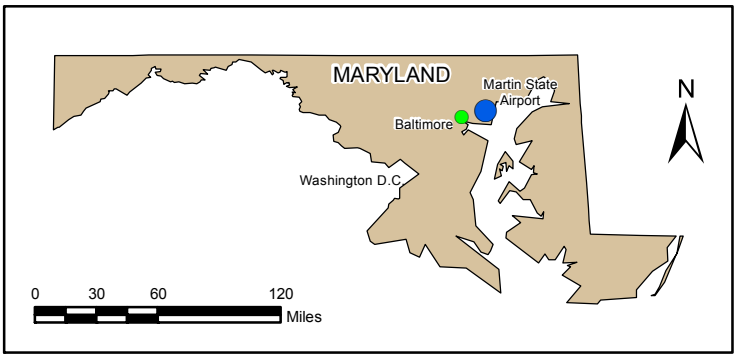

FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

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

DATE MODIFIED:	CREATED BY:
1/13/12	MP

TETRA TECH

Section 3
Investigation Approach and Methodology

A review of previous surface water sampling data for Frog Mortar Creek supported the need for additional investigations to assess the extent to which surface water is affected by groundwater discharged from the Dump Road Area (DRA). Data obtained were used to evaluate chemical concentrations with respect to United States Environmental Protection Agency (USEPA) or Maryland screening levels. 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 developed by Lockheed Martin Corporation (Lockheed Martin). Previously, the volatile organic compounds (VOCs) trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) have 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.

The August 2013 sampling event is the fourth of six surface-water sampling rounds in 2013. The August sampling round assessed water quality in midsummer, when increased recreational use and biological activity in Frog Mortar Creek are expected. The next sampling round is scheduled for September 2013.

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 15, 2013. 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.

Frog Mortar Creek western-shoreline-transect samples (MSA-SW37 through MSA-SW45) were analyzed for VOCs by SW846 Method 8260C, for metals (filtered in the field) by SW846 Methods 6010C/7470A, for hardness by Standard Method SM 2340B, and for hexavalent chromium by USEPA Method 218.6. The eastern shoreline transect samples (i.e., EL-SW01) were analyzed for VOCs only. 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 measured and recorded, along with the depth of water at all surface water sampling locations, at the time of sampling. Tidal-gauge water measurements were also obtained from the staff gauge at 3301 Edwards Lane before and at the completion of the sampling event. Sampling information is documented on the sample log sheets in Appendix A.

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

Hexavalent chromium samples were collected using a different method, in pre-cleaned bottles containing no sample preservatives (e.g., no nitric acid for preserving metal samples, etc.). 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 were collected using a peristaltic pump. No duplicates were collected during the August 2013 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 (COC) forms and surface-water-specific sample log sheets. COC 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. COC forms are provided, along with the data validation reports, in Appendix B.

3.1.3 Sample Nomenclature and Handling

Surface water samples collected from transects SW37 through SW45 were identified with a unique sample identification tag. Surface water samples were labeled with an "MSA-SW" prefix, followed by the sample number, the profile location ("A," "B," "C," or "D"), and the six-digit sampling date. Similarly, surface water samples collected from Edwards Lane transect were identified with an "EL-SW" prefix, the profile location ("A," "B," "C," or "D"), and the six-digit sampling date. For example, the surface water sample collected on August 15, 2013 from MSA-SW37A was labeled as MSA-SW37A-081513. The trip blank was labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-081513).

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

3.1.4 Equipment Decontamination

This project required minimal equipment decontamination. Both dedicated and disposable equipment were used for surface water sampling to reduce decontamination activities and eliminate potential sample cross-contamination. The discrete-interval sampler was cleaned after each use by rinsing it with potable 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.) used 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 COC 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 COC to a designated project assistant and to the laboratory. The project assistant confirmed that the COC 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 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 surface water sample chemical results. Data validation reports and COC are in Appendix B (on compact disc) as PDF files. Appendix C includes a table of all August 2013 Frog Mortar Creek surface water sample analytical data, including non-detects.

Collectively, these data are acceptable for their intended uses (site characterization and risk assessment), except for data qualified as unreliable (UR flag). For this validation, the data qualifiers (i.e., flags) 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:

B The analyte was not detected substantially above the level reported in the laboratory or field blank (i.e., the result is considered an artifact of the laboratory analysis and is not considered a site contaminant).

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

L The analyte is considered present in the sample. However, the value is biased low and the actual value is expected to be higher than the reported value.

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

UR The result is considered qualitatively or quantitatively unreliable.

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

Tertiary butyl-alcohol and vinyl acetate are the only chemicals with (non-detected) results flagged with the "UR" data qualifier. All hexavalent chromium results are flagged with the "*L*" qualifier.

Occasionally, common laboratory or field contaminants may be detected in samples. Analysis of quality control blanks and other internal laboratory blanks (e.g., method blanks, etc.) determines the significance of the analytical results versus possible laboratory or field contaminants. Common laboratory contaminants associated with VOC analyses include acetone, methylene chloride, and 2-butanone. The *National Functional Guidelines* for contract laboratories (USEPA, 1993 and 1994) require that any compound (other than common laboratory contaminants) detected in both the sample and an associated blank must be qualified as such (i.e., with a "*B*" flag) when the sample concentration is less than five times the blank concentration. For the common laboratory contaminants listed above, results must be qualified with a "*B*" flag when the sample concentration is less than 10 times the blank concentration. Data flagged with "*B*" qualifiers included acetone and several instances of metals. The "*B*" qualified results are reported in the Section 4 tables as non-detects, because the results are considered artifacts of the laboratory analyses.

Table 3-1

List of Samples and Chemical Analyses-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Sample Location ID	Analyses Performed (Method)			
	Volatile Organic Compounds (USEPA 8260B)	Dissolved Metals (USEPA 6020A/7470A)	Hexavalent Chromium (USEPA 218.6)	Hardness (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			

SM - standard method
USEPA - United States Environmental Protection Agency

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples August 2013.mxd)
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SW37D
SW37C
SW37B
SW37A
SW42D
SW42C
SW42B
SW42A
SW40D
SW40C
SW40B
SW40A
SW38D
SW38C
SW38B
SW38A
SW41D
SW41C
SW41B
SW41A
SW43D
SW43C
SW43B
SW43A
SW44D
SW44C
SW44B
SW44A
SW45D
SW45C
SW45B
SW45A
SW39D
SW39C
SW39B
SW39A
EL-SW01A
EL-SW01B
EL-SW01C
EL-SW01D

MARYLAND AIR NATIONAL GUARD
3301 Edwards Lane
Middle River, Maryland
Frog Mortar Creek
POND #1
POND #2
Gate
TAXIWAY J
TAXIWAY TANGO
AIRPORT RUNWAY
TAXIWAY F
TAXIWAY D

FIGURE 3-1

SURFACE WATER SAMPLING LOCATIONS, AUGUST 2013 FROG MORTAR CREEK

LEGEND

- AUGUST 2013 SURFACE WATER SAMPLE LOCATION (1 FOOT BELOW WATER SURFACE)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 8/15/13

CREATED BY: MP

TETRA TECH

Section 4
Results

4.1 SURFACE WATER DATA AND SCREENING CRITERIA

Validated chemical data collected in August 2013 from the Frog Mortar Creek surface water samples 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), dissolved (i.e., filtered) metals, hexavalent chromium, and hardness. 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*, 2013)
- site-specific screening levels for swimming were developed for trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) only

The NRWQC, AWQC, and most BTAG screening levels for metals represent concentrations of dissolved metals in the water column; therefore, these criteria are used to screen against filtered (dissolved) metals results. However, the BTAG screening levels for arsenic, mercury, molybdenum, selenium, and thallium are based on the total metals concentration in the water column. During the current surface water sampling round, only dissolved metals in surface water were analyzed for; therefore, the dissolved results for these five metals are not directly comparable to BTAG criteria (which are developed for total metals). The NRWQC screening values for select dissolved metals (cadmium, chromium, copper, lead, nickel, silver, and zinc)

were adjusted for hardness using a site-specific hardness value of 240 milligrams per liter (mg/L) (the lowest and most protective site value for August results), using the methodology in the *National Recommended Water Quality Criteria: 2009* (USEPA, 2009).

Site-specific screening levels were developed by Lockheed Martin Corporation (Lockheed Martin) for TCE, *cis*-1,2-DCE, and VC 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 were compared to these swimming criteria, in addition to comparison to the USEPA and Maryland criteria in Table 4-2, because they provide the most conservative (i.e., most protective) screening levels for Frog Mortar Creek.

Gray shading in Table 4-2 indicates a result that exceeds one or more of its surface water screening criteria. Figures 4-1 through 4-3 show the respective concentrations of TCE, *cis*-1,2-DCE, and VC detected in the August 2013 Frog Mortar Creek samples. Appendix C presents the August 2013 analytical data, including non-detect results.

4.2 SURFACE WATER SAMPLING RESULTS

As shown in Tables 4-1 and 4-2, several VOCs and metals were detected in the August surface water samples. All data discussed herein share the "MSA" prefix; therefore, for this discussion, and to increase readability, this prefix is dropped when referring to transects or samples (e.g., "SW39" refers to transect MSA-SW39).

4.2.1 Volatile Organic Compounds

Several VOCs and metals were detected in the surface water samples. The most frequently detected chlorinated VOCs (cVOCs) detected in the samples were TCE, *cis*-1,2-DCE, and VC; these three VOCs are also the primary cVOCs detected in the DRA groundwater plume. Benzene, toluene, ethylbenzene, and xylenes (BTEX) (which are petroleum-related VOCs detected in DRA groundwater) were detected in 32, 21, nine, and 12 samples, respectively, at low concentrations during the current sampling event. These BTEX detection frequencies are much greater than in previous rounds. Acetone was also detected in six of 40 samples (Appendix C). However, all acetone detections were reported as detected in laboratory blanks (i.e., flagged with "*B*" qualifiers), so its presence is considered an artifact of the laboratory analyses (acetone is not included in Table 4-1 because of its association with the laboratory blank).

TCE was detected in all 40 samples, at concentrations ranging from 0.30 micrograms per liter (µg/L) to 4.9 µg/L (Table 4-2 and Figure 4-1). *cis*-1,2-DCE was detected in 32 of 40 samples (Table 4-2 and Figure 4-2), at concentrations ranging from 0.22 µg/L to 3.4 µg/L. VC was detected less frequently (in 27 of 40 samples), at concentrations ranging from 0.22 µg/L to 3.2 µg/L (Figure 4-3). In August 2013, all surface water VOCs were detected at concentrations less than their respective BTAG freshwater screening levels. Toluene is the only exception; two samples (SW43D and SW45A) had toluene concentrations that exceed its screening level. VC exceeded the swimming site-specific screening level (0.7 µg/L) at five western shoreline or "A" sampling locations, including SW38A (3.2 µg/L), SW40A (1.5 µg/L), SW41A (1.1 µg/L), SW42A (2.6 µg/L), and SW43A (1.1 µg/L).

BTEX (common volatile components of petroleum fuels) are also chemicals of concern in site groundwater. Benzene was detected at 32 locations at low concentrations, ranging from 0.13 µg/L to 0.66 µg/L. These concentrations are slightly less than three orders of magnitude (i.e., three powers of 10) below benzene's lowest screening level criterion (51 µg/L, the NRWQC for human health consumption-of-aquatic-organism only). Toluene was detected at 21 locations at low concentrations ranging from 0.13 µg/L to 2.5 µg/L. Toluene exceeded the BTAG site-specific screening level (2 µg/L) at SW45A (2.5 µg/L) and SW43D (2.2 µg/L). Ethylbenzene was detected in nine samples collected during this sampling event, but all concentrations were less than the screening criteria. Total xylenes were detected at 12 locations at low concentrations ranging from 0.46 µg/L to 1.7 µg/L, which is slightly less than one order of magnitude below xylene's lowest criterion (13 µg/L, established by BTAG).

In prior sampling episodes, surface water samples from transects east of the DRA (SW38, SW40, and SW41) have had the highest TCE concentrations. In August 2013, TCE concentrations were highest at transect locations along 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). These results are higher than the July 2013 results, when the highest detected TCE concentrations were at SW43A (3.6 µg/L) and SW41A (1.7 µg/L). Overall, TCE concentrations at 20 of the 40 sampling locations show increases from July 2013. The greatest increases occurred in the western shoreline or "A" samples collected at transect SW38 southward to transect SW39. In August 2013, all TCE increases occurred in these transects, while TCE decreased in transects north of SW38. TCE

concentrations in August for the eastern shoreline transect (EL-SW01) generally decreased (slightly), but were similar to those of July.

August 2013 TCE concentrations detected on the western shore of Frog Mortar Creek vary by slightly more than one order of magnitude over the sampling area (Figure 4-1), ranging from 0.30 µg/L (SW39A) to 4.9 µg/L (SW43A). Samples from the northernmost transects (SW37, SW42, and SW40) and SW01 (adjacent to Edwards Lane) had the lowest TCE concentrations, overall; detected concentrations are all less than 1 µg/L. TCE concentrations are highest in samples collected near the western shoreline (at transects SW38, SW41, SW43, SW44) and at SW45, with concentrations generally decreasing with distance from the western shore of Frog Mortar Creek along these five transects. Concentrations from these transects range from 0.61*J* µg/L to 4.9 µg/L. No discernible pattern in TCE distribution can be identified along the northernmost transects (SW37, SW42, SW40) or the southernmost transect (SW39). In the northernmost transects, TCE concentrations range from 0.37 µg/L to 0.60 µg/L, and are similar along each transect. Concentrations from SW39 range from 0.3 µg/L to 1.6 µg/L, with the lowest concentration detected at the shoreline.

August 2013 detections of *cis*-1,2-DCE are widespread, with the highest concentrations detected in samples collected from transects SW43 and SW41 (Figure 4-2). The highest concentrations were detected at the western shoreline (or "A") samples at SW43A (3.4 µg/L), SW41A (1.8 µg/L), SW42A (1.5 µg/L), SW38A (1.4 µg/L), SW45A (1.2 µg/L), and SW44A (1 µg/L); the remaining detected concentrations of *cis*-1,2-DCE were less than 1 µg/L. Concentrations of *cis*-1,2-DCE typically decrease with increasing distance from the western shore of Frog Mortar Creek along transects SW43, SW41, and SW38 (the transects with maximum concentrations). No pattern for *cis*-1,2-DCE is discernable along northernmost transects SW37, SW42, and SW40 (except that the highest concentrations are in "A" or "B" samples collected closer to the shoreline). *cis*-1,2-DCE concentrations in samples from these northernmost transects range from undetected to 1.5 µg/L. Concentrations of *cis*-1,2-DCE gradually and consistently decrease moving south from transect SW43. Similar to TCE, the concentrations of *cis*-1,2-DCE detected in August 2013 are typically greater than those detected in July 2013. The greatest increases occurred in the western shoreline or "A" samples collected at transect SW42 southward to transect SW45 (exclusive of SW43A, where *cis*-1,2-DCE decreased from 5.4 µg/L in July to

3.4 µg/L in August). Most *cis*-1,2-DCE increases in the August samples occurred in transect SW38 and in southern transects SW44, SW45, and SW39. *cis*-1,2-DCE concentrations in August for the eastern shoreline transect (EL-SW01) are similar to those of July.

VC was detected in 27 of 40 samples collected in August 2013 (Figure 4-3), with the highest concentration at SW38A (3.2 µg/L). VC concentrations exceeded its site-specific screening level for swimming (0.7 µg/L) in five western shoreline "A" samples: SW38A (3.2 µg/L), SW42A (2.6 µg/L), SW40A (1.5 µg/L), SW41A (1.1 µg/L), and SW43A (1.1 µg/L). In general, VC concentrations in August 2013 (with five exceedances) were greater than those detected in the July 2013 sampling round (with one exceedance), but lower than in June 2013 (with 14 exceedances of the swimming screening level of 0.7 µg/L). The maximum VC concentration in August (3.2 µg/L) is more than three times higher than the July concentration (1 µg/L). The spatial patterns of August VC increases and decreases relative to July data are similar to those for TCE: the greatest VC increases are in the western shoreline "A" samples; most VC increases are in transects SW38 southward to transect SW39. VC decreased in the northern transects.

4.2.2 Metals

Most (32 of 36) August 2013 dissolved arsenic concentrations were above the human health consumption-of-organism screening criterion, but less than the AWQC criteria, with concentrations ranging from 1.4 µg/L to 2.1 µg/L. The range of dissolved arsenic concentrations is similar to the range for the July 2013 results (1.7 µg/L to 2.7 µg/L). Dissolved barium concentrations (15 µg/L to 19 µg/L) exceeded the BTAG ecological screening level (4 µg/L) in all samples. These concentrations are less than, but still similar to, those detected in July 2013 (21 µg/L to 24 µg/L). Two concentrations of cadmium (0.46 µg/L at SW40B and 0.47 µg/L at SW44D) slightly exceeded its lowest screening criterion (0.45 µg/L). One detection of copper (32 µg/L at SW42C) exceeded the screening criteria, while all other detections (ranging from 4.6 to 5.1 µg/L) were below screening levels.

4.2.3 Hexavalent Chromium

Hexavalent chromium was detected in 35 of 36 samples, at low concentrations (0.049 µg/L to 0.109 µg/L) nearly 100 times below its lowest screening level (11 µg/L).

4.3 UPCOMING 2013 SAMPLING ROUNDS

Lockheed Martin Corporation will monitor surface water for the same 40 locations on Frog Mortar Creek in September 2013.

Table 4-1

Statistical Summary of Analytes Detected in Surface Water Samples—August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

Chemical	Frequency of detection		Mininum non-detected concentration	Maximum non-detected concentration	Mininum detected concentration	Maximim detected concentration	Transect location(s) with maximum detected concetration	Mean of all samples	Mean of positive detects	Standard Deviation
	Number	Percent								
VOLATILE ORGANICS (µg/L)										
TRICHLOROETHENE	40/40	100	--	--	0.3 J	4.9	MSA-SW43A	1.07	1.07	0.89
BENZENE	32/40	80	0.13	0.13	0.13 J	0.66 J	MSA-SW45A	0.23	0.27	0.16
CIS-1,2-DICHLOROETHENE	32/40	80	0.17	0.17	0.22 J	3.4	MSA-SW43A	0.60	0.73	0.61
VINYL CHLORIDE	27/40	68	0.22	0.22	0.22 J	3.2	MSA-SW38A	0.47	0.64	0.64
TOLUENE	21/40	53	0.13	0.13	0.13 J	2.5	MSA-SW45A	0.56	1.00	0.71
1,2,4-TRIMETHYLBENZENE	13/40	33	0.12	0.12	0.12 J	0.64 J	MSA-SW43D	0.16	0.37	0.17
M+P-XYLENES	12/40	30	0.24	0.24	0.29 J	1.1 J	MSA-SW43D, MSA-SW45A	0.30	0.74	0.31
O-XYLENE	12/40	30	0.14	0.14	0.17 J	0.59 J	MSA-SW45A	0.16	0.38	0.16
TOTAL XYLENES	12/40	30	0.14	0.14	0.46 J	1.7 J	MSA-SW43D,SW45A	0.39	1.12	0.53
ETHYLBENZENE	9/40	23	0.17	0.17	0.17 J	0.33 J	MSA-SW45A	0.12	0.24	0.07
1,2,3-TRIMETHYLBENZENE	7/40	18	0.0059	0.0059	0.14 J	0.26 J	MSA-SW45A	0.038	0.206	0.080
2-BUTANONE	1/40	3	0.57	0.57	0.57 J	0.57 J	MSA-SW38D	0.29	0.57	0.05
CARBON DISULFIDE	1/40	3	0.13	0.13	0.21 J	0.21 J	MSA-SW39A	0.07	0.21	0.02
NAPHTHALENE	2/40	5	0.24	0.24	0.24 J	0.3 J	MSA-SW45A	0.13	0.27	0.03
FILTERED METALS (µg/L)										
ARSENIC	36/36	100	--	--	1.4 J	2.1 J	MSA-SW40B	1.69	1.69	0.17
BARIUM	36/36	100	--	--	15	19	MSA-SW39D, MSA-44D	16.1	16.1	0.99
MOLYBDENUM	36/36	100	--	--	1.4 J	1.8 J	MSA-SW44D	1.56	1.56	0.08
NICKEL	36/36	100	--	--	1.2 J	3.3	MSA-SW45C	1.56	1.56	0.45
VANADIUM	31/36	86	1.7	2.4	1.6 J	2.1 J	MSA-SW37C,39D,40B,42D,43B,43D	1.80	1.93	0.35
SELENIUM	23/36	64	0.34	0.34	0.34 J	1.1 J	MSA-SW40B	0.38	0.50	0.23
CHROMIUM	17/36	47	0.18	0.76	0.2 J	0.85 J	MSA-SW38B	0.23	0.35	0.18
LEAD	17/36	47	0.14	0.14	0.14 J	0.77 J	MSA-SW40B	0.17	0.28	0.18
CADMIUM	2/36	6	0.026	0.3	0.46 J	0.47 J	MSA-SW44D	0.05	0.47	0.11
COBALT	2/36	6	0.056	0.4	0.53 J	0.54 J	MSA-SW44D	0.08	0.54	0.12
COPPER	5/36	14	3.8	5	4.6	32	MSA-SW42C	3.23	10.2	5.01
MISCELLANEOUS (µg/L)										
HEXAVALENT CHROMIUM	35/36	97	0.04	0.04	0.049 L	0.109 L	MSA-SW45C	0.071	0.073	0.019
MISCELLANEOUS (mg/L)										
CALCIUM HARDNESS AS CACO3	36/36	100	--	--	66	80	MSA-SW39D,SW44D	71.5	71.5	3.0
HARDNESS AS CACO3	36/36	100	--	--	240	300	MSA-SW44D	261	261	13.0
MAGNESIUM HARDNESS AS CACO3	36/36	100	--	--	170	220	MSA-SW39D,SW44D	189	189	10.5

Footnotes: All samples were collecetd on August 13, 2013

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-detected concentration not available because the detection rate is 100%

B - analyte detected in laboratory blank

$CaCO_3$ - calcium carbonate

J - Positive result is considered estimated

L - Positive result is considered estimated biased low. Actual value may be higher.

K - Positive result is considered biased high. Actual value may be lower.

mg/L - milligrams per liter

SW - surface water

µg/L - micrograms per liter

Associated Samples:

EL-SW01A-081513
EL-SW01B-081513
EL-SW01C-081513
EL-SW01D-081513
MSA-SW37A-081513
MSA-SW37B-081513
MSA-SW37C-081513
MSA-SW37D-081513
MSA-SW38A-081513
MSA-SW38B-081513
MSA-SW38C-081513
MSA-SW38D-081513
MSA-SW39A-081513
MSA-SW39B-081513
MSA-SW39C-081513
MSA-SW39D-081513
MSA-SW40A-081513
MSA-SW40B-081513
MSA-SW40C-081513
MSA-SW40D-081513
MSA-SW41A-081513
MSA-SW41B-081513
MSA-SW41C-081513
MSA-SW41D-081513
MSA-SW42A-081513
MSA-SW42B-081513
MSA-SW42C-081513
MSA-SW42D-081513
MSA-SW43A-081513
MSA-SW43B-081513
MSA-SW43C-081513
MSA-SW43D-081513
MSA-SW44A-081513
MSA-SW44B-081513
MSA-SW44C-081513
MSA-SW44D-081513
MSA-SW45A-081513
MSA-SW45B-081513
MSA-SW45C-081513
MSA-SW45D-081513

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FIGURE 4-1

CONCENTRATIONS OF TRICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2013 FROG MORTAR CREEK

LEGEND

- AUGUST 2013 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

(0.6) = TRICHLOROETHENE CONCENTRATION
J = ESTIMATED VALUE
- - = NOT DETECTED

CONCENTRATION IN MICROGRAMS PER LITER (UG/L)

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/23/13

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples CIS 1-2 Dichloroethene August2013.mxd)
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FIGURE 4-2

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2013 FROG MORTAR CREEK

LEGEND

- AUGUST 2013 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

(1.7) = CIS-1,2-DICHLOROETHENE CONCENTRATION
J = ESTIMATED VALUE
- - = NOT DETECTED

CONCENTRATION IN MICROGRAMS PER LITER (UG/L)

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/23/13

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples Vinyl Chloride concentration August2013.mxd)
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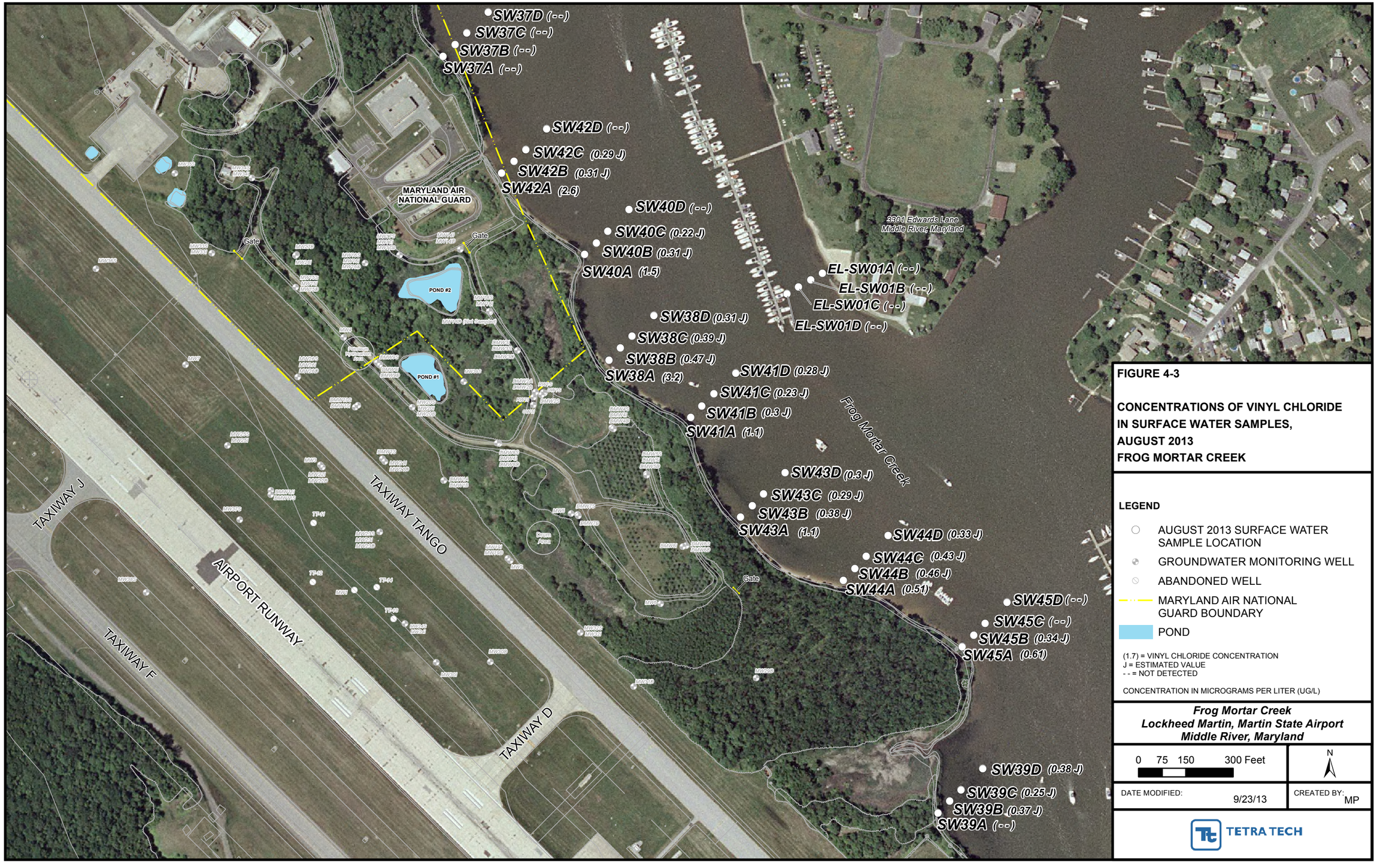

FIGURE 4-3

CONCENTRATIONS OF VINYL CHLORIDE IN SURFACE WATER SAMPLES, AUGUST 2013 FROG MORTAR CREEK

LEGEND

- AUGUST 2013 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

(1.7) = VINYL CHLORIDE CONCENTRATION
J = ESTIMATED VALUE
- - = NOT DETECTED

CONCENTRATION IN MICROGRAMS PER LITER (UG/L)

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/23/13

CREATED BY: MP

TETRA TECH

Section 5
Summary

The following summarizes Lockheed Martin Corporation's (Lockheed Martin's) August 2013 Frog Mortar Creek surface water investigation and findings:

- Forty surface water samples were collected from Frog Mortar Creek on August 15, 2013 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 along 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 along a transect extending out from a property (3301 Edwards Lane) across Frog Mortar 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* (United States Environmental Protection Agency, 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) for acute and chronic aquatic-organism exposures and for human health aquatic-organism-consumption; Maryland ambient water quality criteria (AWQC) for acute and chronic aquatic-organism exposures and for human health aquatic-organism-consumption; and site-specific screening levels developed to evaluate risks to recreational swimmers from exposure to three volatile organic

compounds in surface water: trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis-1,2*-DCE), and vinyl chloride (VC).

- Volatile organic compounds (primarily trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride) and metals were detected in the August 2013 surface water samples.

- Detected concentrations of volatile organic compounds were highest at sampling locations SW38A, SW41A, and SW43A, which are east of the Dump Road Area monitoring wells that contain some of the highest concentrations of site-related constituents in groundwater.

- Volatile organic compound concentrations detected in August 2013 are generally higher than concentrations detected in July 2013. In August 2013, the highest trichloroethene concentration was 4.9 micrograms per liter (µg/L), while in July 2013, the highest trichloroethene concentration was 3.6 µg/L; maximum trichloroethene concentrations in both July and August occurred at SW43A. In August 2013, the highest *cis*-1,2-dichloroethene concentrations were detected at SW43A (3.4 µg/L) and SW41A (1.8 µg/L); in July 2013, the two highest *cis*-1,2-dichloroethene concentrations (5.4 and 1.3 µg/L) were detected at locations SW43A and SW43B, respectively. The highest August 2013 vinyl chloride concentration was detected at SW38A (3.2 µg/L); in July 2013, the highest vinyl chloride concentration (1 µg/L) was at SW37A.

- At sampling transects with the highest August 2013 concentrations of volatile organic compounds (transect SW43 for trichloroethene and *cis*-1,2-dichloroethene and transect SW38 for vinyl chloride), trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride concentrations are highest near the shoreline, and decrease progressively in samples collected farther from the shoreline. In August 2013, all surface water volatile organic compounds (except for toluene in two samples) were detected at concentrations less than their respective BTAG freshwater screening levels. VC exceeded the swimming site-specific screening level (0.7 µg/L) at five western shoreline or "A" sampling locations, including SW38A (3.2 µg/L), SW42A (2.6 µg/L), SW40A (1.5 µg/L), SW41A (1.1 µg/L), and SW43A (1.1 µg/L).

- Volatile organic compound concentrations detected in samples collected from the eastern shore of Frog Mortar Creek (locations EL-SW01A–D) during the August 2013 sampling round are all less than screening levels.

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) (petroleum-related volatile organic compounds detected in the Dump Road Area groundwater) were detected in 32, 21, nine, and 12 samples, respectively, at low concentrations during the current sampling event. These detection frequencies are much greater than in previous rounds.

- Metals exceeding screening criteria include dissolved barium in all 36 samples and dissolved arsenic in 32 of 36 samples. Overall, the August 2013 concentration ranges for metals are consistent with those detected in previous rounds.

- Dissolved hexavalent chromium was detected in 35 of 36 samples, at trace concentrations ranging from 0.049 µg/L to 0.109 µg/L. These concentrations are well below its lowest screening criterion (11 µg/L).

Section 6
References

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2. Tetra Tech (Tetra Tech, Inc.), 2013. *2013 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.

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6. USEPA (U.S. Environmental Protection Agency) 2006. *Region III Biological Technical Advisory Group Freshwater Screening Benchmarks*. July.

7. USEPA (U.S. Environmental Protection Agency) 2009. *National Recommended Water Quality Criteria*. U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology.
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   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.: 112IC04021-07

Sample ID No.: MSA-SW-01A
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0800								
Depth: 1 foot	Clear	6.54	2.53	29.45	9.87	2.46	1.3	188
Method: Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-01B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0807								
Depth: 1 foot	Clear	6.78	2.54	24.86	9.48	6.10	1.3	172
Method: Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-01C
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0814								
Depth: 1 foot	clear	7.07	2.55	25.12	10.03	2.34	1.3	168
Method: Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-01D
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0817								
Depth: 1 foot	Clear	7.12	2.62	27.30	11.22	2.36	1.3	168
Method: Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-37A
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1227								
Depth:	1 foot	Clear	7.59	2.45	27.26	7.97	6.45	1.3	141
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-37B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1232								
Depth: 1 foot	Clear	7.62	2.46	27.21	8.66	7.06	1.3	133
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-376
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1237								
Depth: 1 foot	Clear	7.79	2.46	26.71	10.67	7.81	1.3	134
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1243								
Depth:	1 foot	clear	7.76	2.45	26.62	9.38	6.87	1.3	134
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-38A
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1126								
Depth:	1 foot	clear	7.58	2.43	26.13	9.34	6.21	1.2	157
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-388
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1131								
Depth: 1 foot								
Method: Grab	Clear	7.61	2.46	26.04	9.86	6.22	1.3	156

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-386
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1135								
Depth: 1 foot	Clear	7.60	2.47	26.11	9.69	6.15	1.3	153
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-38D
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1140								
Depth: 1 foot								
Method: Grab	clear	7.62	2.48	26.10	9.44	6.37	1.3	151

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-39A
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	0826								
Depth:	1 foot	clear	7.14	2.66	24.92	9.62	3.20	1.4	161
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4^{0}C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-39B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0833								
Depth: 1 foot	clear	7.22	2.57	24.96	10.18	2.99	1.3	159
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-39C
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0838								
Depth: 1 foot	Clear	7.27	2.63	24.97	14.1	2.70	1.3	164
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-390
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date: 8/15/2013								
Time: 0844								
Depth: 1 foot	clear	7.29	2.63	25.15	17.3	2.87	1.4	153
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-40A
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1146								
Depth:	1 foot								
Method:	Grab	Clear	7.60	2.44	26.25	10.80	6.85	1.2	158

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-40B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1158								
Depth: 1 foot								
Method: Grab	Clear	7.60	2.45	26.51	10.53	6.70	1.3	155

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-40C
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1202	Clear	7.66	2.48	26.28	10.35	6.95	1.3	148
Depth: 1 foot								
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112iC04021-07

Sample ID No.: MSA-SW-400
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:	8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time:	1206								
Depth:	1 foot	clear	7.66	249	26.25	9.51	6.78	1.3	146
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-41A
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1004								
Depth:	1 foot	clear	7.48	2.43	25.86	12.7	6.66	1.3	157
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-418
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1015								
Depth:	1 foot	clear	7.50	2.51	25.64	10.67	4.97	1.3	156
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-41C
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1019								
Depth:	1 foot	clear	7.49	2.53	25.68	16.80	4.72	1.3	154
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-410
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1024								
Depth: 1 foot								
Method: Grab	Clear	7.49	2.53	25.58	10.37	4.77	1.3	154

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-42A
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1209								
Depth:	1 foot	clear	7.59	2.46	27.10	9.02	6.26	1.3	142
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-42B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1213								
Depth: 1 foot	Clear	7.66	2.48	26.99	8.41	7.22	1.3	142
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-42C
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: 8/15/2013	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	7.69	2.49	26.55	9.10	7.05	1.3	137
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-420
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. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/15/2013								
Time:	1222								
Depth:	1 foot	clear	7.59	2.47	26.30	8.71	6.97	1.3	143
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-43A
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0947								
Depth: 1 foot	Clear	7.37	2.47	25.56	1023	4.54	1.3	152
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-43B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0953								
Depth: 1 foot								
Method: Grab	Clear	7.40	2.45	25.35	11.28	4.93	1.3	150

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Joan Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-43C
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0957								
Depth: 1 foot	Clear	7.43	2.53	25.49	9.99	4.08	1.3	157
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-430
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1001								
Depth: 1 foot	Clear	7.41	2.56	25.98	13.01	4.98	1.3	155
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-44A
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0920								
Depth: 1 foot	clear	7.37	2.50	25.09	11.3	7.16	1.3	155
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-44B
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:	Time:	Depth:	Method:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
8/15/2013	0925	1 foot	Grab	Clear	7.33	2.55	25.29	12.7	4.24	1.3	161

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-44C
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0929								
Depth: 1 foot	Clear	7.38	2.56	25.85	11.3	3.74	1.3	156
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-440
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0936								
Depth: 1 foot	clear	7.39	2.62	25.34	17.3	5.80	1.3	153
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-45A
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0851								
Depth: 1 foot	Clear	731	2.51	24.72	14.0	6.51	1.3	148
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-45B
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0858								
Depth: 1 foot								
Method: Grab	Clear	7.31	2.60	25.15	13.8	3.64	1.3	145

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-45C
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0903								
Depth: 1 foot	Clear	7.31	2.62	25.24	14.9	3.51	1.3	150
Method: Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC04021-07

Sample ID No.: MSA-SW-450
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: 8/15/2013	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 0907								
Depth: 1 foot								
Method: Grab	Clear	7.31	2.62	25.26	14.8	3.19	1.3	152

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCL pH<2	3- 40mL glass vials	yes
Dissolved Metals	HNO3 pH<2	1-500 mL plastic bottle	yes
Hexavalent Chromium	<4°C	1-250mL plastic bottle	yes

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Josh Mullis

APPENDIX B—DATA-VALIDATION REPORTS (ON CD)

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **September 20, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- HEXAVALENT CHROMIUM**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
SDG R1305995

SAMPLES: 36/Aqueous/

MSA-SW37A-081513	MSA-SW37B-081513
MSA-SW37C-081513	MSA-SW37D-081513
MSA-SW38A-081513	MSA-SW38B-081513
MSA-SW38C-081513	MSA-SW38D-081513
MSA-SW39A-081513	MSA-SW39B-081513
MSA-SW39C-081513	MSA-SW39D-081513
MSA-SW40A-081513	MSA-SW40B-081513
MSA-SW40C-081513	MSA-SW40D-081513
MSA-SW41A-081513	MSA-SW41B-081513
MSA-SW41C-081513	MSA-SW41D-081513
MSA-SW42A-081513	MSA-SW42B-081513
MSA-SW42C-081513	MSA-SW42D-081513
MSA-SW43A-081513	MSA-SW43B-081513
MSA-SW43C-081513	MSA-SW43D-081513
MSA-SW44A-081513	MSA-SW44B-081513
MSA-SW44C-081513	MSA-SW44D-081513
MSA-SW45A-081513	MSA-SW45B-081513
MSA-SW45C-081513	MSA-SW45D-081513

Overview

The sample set for Lockheed MSA, SDG R1305995, consists of thirty six (36) aqueous environmental samples. This SDG contained no field duplicate pairs.

All samples were analyzed for hexavalent chromium. The samples were collected by Tetra Tech August 15th, 2013 and analyzed by ALS Environmental. Hexavalent chromium analyses were conducted using EPA method 218.6.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, 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 matrix spike and matrix spike duplicate analyzed on sample MSA-SW39D-081513 had a percent recovery < 90% for hexavalent chromium. Samples MSA-SW39A-081513 and MSA-SW39D-081513 were affected. The detected result for MSA-SW39D-081513 was qualified as biased low (L). The non-detected result for sample MSA-SW39A-081513 was qualified as biased low (UL).

- All samples (except MSA-SW39A-081513 and MSA-SW39D-081513) were analyzed several hours (but less than 2 days) beyond the 24 hour holding time. The detected results were qualified as biased low (L).

- Samples MSA-SW39A-081513 and MSA-SW39D-081513 were originally analyzed on 8/16/13, however; due to closing calibration standard and closing calibration blank non-compliances the samples were reanalyzed on 8/20/13. The reanalysis was performed greater than 2X (5 days) the 24 hour holding time. The sample results from the original analysis and reanalysis were comparable as follows: non-detected for hexavalent chromium in MSA-SW39A-081513 on both dates and detected hexavalent chromium in MSA-SW39D-081513 at 0.062 ug/L and 0.079 ug/L, respectively, on both dates. Therefore, it is the reviewer's professional opinion that the results were not affected by the length of time between analyses. Nondetected and detected sample results were qualified as biased low (L and UL), respectively.

Notes

The non-detected result was reported to the method reporting limit (MRL).

The samples were preserved by the lab upon receipt to a pH of 9.3-9.7.

All samples were analyzed at a 2X dilution.

Executive Summary

Laboratory Performance: Holding time non-compliances resulted in the qualification of sample results.

Other Factors Affecting Data Quality: Matrix spike and matrix spike duplicate non-compliances resulted in the qualification of sample results.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Tetra Tech
Megan Carson
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 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04793	NSAMPLE	MSA-SW37A-081513			MSA-SW37B-081513			MSA-SW37C-081513			MSA-SW37D-081513		
SDG: R1305995	LAB_ID	R1305995-025			R1305995-026			R1305995-027			R1305995-028		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.06	L	H	0.06	L	H	0.063	L	H	0.056	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW38A-081513			MSA-SW38B-081513			MSA-SW38C-081513			MSA-SW38D-081513		
SDG: R1305995	LAB_ID	R1305995-029			R1305995-030			R1305995-031			R1305995-032		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.073	L	H	0.101	L	H	0.06	L	H	0.055	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW39A-081513			MSA-SW39B-081513			MSA-SW39C-081513			MSA-SW39D-081513		
SDG: R1305995	LAB_ID	R1305995-033			R1305995-034			R1305995-035			R1305995-036		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.04	UL	DH	0.07	L	H	0.068	L	H	0.079	L	DH

PROJ_NO: 04793	NSAMPLE	MSA-SW40A-081513			MSA-SW40B-081513			MSA-SW40C-081513			MSA-SW40D-081513		
SDG: R1305995	LAB_ID	R1305995-013			R1305995-014			R1305995-015			R1305995-016		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.087	L	H	0.077	L	H	0.049	L	H	0.063	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW41A-081513			MSA-SW41B-081513			MSA-SW41C-081513			MSA-SW41D-081513		
SDG: R1305995	LAB_ID	R1305995-017			R1305995-018			R1305995-019			R1305995-020		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.107	L	H	0.067	L	H	0.071	L	H	0.053	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW42A-081513			MSA-SW42B-081513			MSA-SW42C-081513			MSA-SW42D-081513		
SDG: R1305995	LAB_ID	R1305995-021			R1305995-022			R1305995-023			R1305995-024		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.07	L	H	0.058	L	H	0.096	L	H	0.095	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW43A-081513			MSA-SW43B-081513			MSA-SW43C-081513			MSA-SW43D-081513		
SDG: R1305995	LAB_ID	R1305995-001			R1305995-002			R1305995-003			R1305995-004		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.072	L	H	0.075	L	H	0.056	L	H	0.105	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW44A-081513			MSA-SW44B-081513			MSA-SW44C-081513			MSA-SW44D-081513		
SDG: R1305995	LAB_ID	R1305995-005			R1305995-006			R1305995-007			R1305995-008		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.073	L	H	0.071	L	H	0.052	L	H	0.062	L	H

PROJ_NO: 04793	NSAMPLE	MSA-SW45A-081513			MSA-SW45B-081513			MSA-SW45C-081513			MSA-SW45D-081513		
SDG: R1305995	LAB_ID	R1305995-009			R1305995-010			R1305995-011			R1305995-012		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.088	L	H	0.079	L	H	0.109	L	H	0.059	L	H

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1227
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW37A-081513		
Lab Code:	R1305995-025	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.060**		µg/L	0.040	2	NA	8/16/13 20:02	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1232
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW37B-081513		
Lab Code:	R1305995-026	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.060		µg/L	0.040	2	NA	8/16/13 20:28	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1237
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW37C-081513		
Lab Code:	R1305995-027	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.063		µg/L	0.040	2	NA	8/16/13 20:37	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1243
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW37D-081513		
Lab Code:	R1305995-028	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.056**		µg/L	0.040	2	NA	8/16/13 20:45	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1126
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW38A-081513		
Lab Code:	R1305995-029	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.073		µg/L	0.040	2	NA	8/16/13 20:54	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1131
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW38B-081513		
Lab Code:	R1305995-030	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.101**		µg/L	0.040	2	NA	8/16/13 21:02	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1135
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW38C-081513		
Lab Code:	R1305995-031	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.060		µg/L	0.040	2	NA	8/16/13 21:10	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1140
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW38D-081513		
Lab Code:	R1305995-032	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.055		µg/L	0.040	2	NA	8/16/13 21:19	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0826
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW39A-081513		
Lab Code:	R1305995-033	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.040	U	µg/L	0.040	2	NA	8/20/13 12:45	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0833
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW39B-081513		
Lab Code:	R1305995-034	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.070		µg/L	0.040	2	NA	8/16/13 21:36	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0838
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW39C-081513		
Lab Code:	R1305995-035	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.068		µg/L	0.040	2	NA	8/16/13 21:44	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0844
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW39D-081513		
Lab Code:	R1305995-036	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.079		µg/L	0.040	2	NA	8/20/13 12:54	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1146
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW40A-081513		
Lab Code:	R1305995-013	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.087		µg/L	0.040	2	NA	8/16/13 17:49	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1158
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW40B-081513		
Lab Code:	R1305995-014	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.077		µg/L	0.040	2	NA	8/16/13 17:57	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1202
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW40C-081513		
Lab Code:	R1305995-015	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.049		µg/L	0.040	2	NA	8/16/13 18:05	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1206
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW40D-081513		
Lab Code:	R1305995-016	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.063**		µg/L	0.040	2	NA	8/16/13 18:14	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1009
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW41A-081513		
Lab Code:	R1305995-017	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.107		µg/L	0.040	2	NA	8/16/13 18:22	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1015
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW41B-081513		
Lab Code:	R1305995-018	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.067		µg/L	0.040	2	NA	8/16/13 18:47	

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Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1019
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW41C-081513		
Lab Code:	R1305995-019	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.071**		µg/L	0.040	2	NA	8/16/13 18:56	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1028
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW41D-081513		
Lab Code:	R1305995-020	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.053**		µg/L	0.040	2	NA	8/16/13 19:04	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1209
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW42A-081513		
Lab Code:	R1305995-021	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.070**		µg/L	0.040	2	NA	8/16/13 19:13	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1213
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW42B-081513		
Lab Code:	R1305995-022	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.058**		µg/L	0.040	2	NA	8/16/13 19:37	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1217
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW42C-081513		
Lab Code:	R1305995-023	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.096		µg/L	0.040	2	NA	8/16/13 19:45	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1222
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW42D-081513		
Lab Code:	R1305995-024	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.095**		µg/L	0.040	2	NA	8/16/13 19:54	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0947
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW43A-081513		
Lab Code:	R1305995-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.072		µg/L	0.040	2	NA	8/16/13 14:42	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0953
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW43B-081513		
Lab Code:	R1305995-002	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.075		µg/L	0.040	2	NA	8/16/13 15:32	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0957
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW43C-081513		
Lab Code:	R1305995-003	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.056		µg/L	0.040	2	NA	8/16/13 15:41	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 1001
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW43D-081513		
Lab Code:	R1305995-004	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.105**		µg/L	0.040	2	NA	8/16/13 15:49	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0920
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW44A-081513		
Lab Code:	R1305995-005	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.073		µg/L	0.040	2	NA	8/16/13 15:58	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0925
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW44B-081513		
Lab Code:	R1305995-006	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.071**		µg/L	0.040	2	NA	8/16/13 16:06	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0929
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW44C-081513		
Lab Code:	R1305995-007	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.052**		µg/L	0.040	2	NA	8/16/13 16:14	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0936
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW44D-081513		
Lab Code:	R1305995-008	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.062**		µg/L	0.040	2	NA	8/16/13 16:23	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0851
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW45A-081513		
Lab Code:	R1305995-009	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.088**		µg/L	0.040	2	NA	8/16/13 16:31	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0858
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW45B-081513		
Lab Code:	R1305995-010	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.079		µg/L	0.040	2	NA	8/16/13 16:40	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0903
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW45C-081513		
Lab Code:	R1305995-011	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	**0.109**		µg/L	0.040	2	NA	8/16/13 17:06	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	8/15/13 0907
Sample Matrix:	Water	**Date Received:**	8/16/13
Sample Name:	MSA-SW45D-081513		
Lab Code:	R1305995-012	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.059		µg/L	0.040	2	NA	8/16/13 17:30	

APPENDIX C

SUPPORT DOCUMENTATION

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	1 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 1121L04793.08
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☒ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW43A-081513	8/15/2013	0947	SW	Water	1		x	
MSA-SW43B-081513	8/15/2013	0953	SW	Water	1		x	
MSA-SW43C-081513	8/15/2013	0957	SW	Water	1		x	
MSA-SW43D-081513	8/15/2013	1001	SW	Water	1		x	
MSA-SW44A-081513	8/15/2013	0920	SW	Water	1		x	
MSA-SW44B-081513	8/15/2013	0925	SW	Water	1		x	
MSA-SW44C-081513	8/15/2013	0929	SW	Water	1		x	
MSA-SW44D-081513	8/15/2013	0936	SW	Water	1		x	
MSA-SW45A-081513	8/15/2013	0851	SW	Water	1		x	
MSA-SW45B-081513	8/15/2013	0858	SW	Water	1		x	
MSA-SW45C-081513	8/15/2013	0903	SW	Water	1		x	
MSA-SW45D-081513	8/15/2013	0907	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:
Relinquished by:	Tetra Tech	8/15/13 1500		ALS	8-16-13 07:55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

R1305995 5
Tetra Tech NUS,Inc.
MSA Surface Water

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	2 of 2 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112-10417 93.08
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			Sampler:
P O #	☒ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW40A-081513	8/15/2013	1146	SW	Water	1		x	
MSA-SW40B-081513	8/15/2013	1158	SW	Water	1		x	
MSA-SW40C-081513	8/15/2013	1202	SW	Water	1		x	
MSA-SW40D-081513	8/15/2013	1206	SW	Water	1		x	
MSA-SW41A-081513	8/15/2013	1009	SW	Water	1		x	
MSA-SW41B-081513	8/15/2013	1015	SW	Water	1		x	
MSA-SW41C-081513	8/15/2013	1019	SW	Water	1		x	
MSA-SW41D-081513	8/15/2013	1024	SW	Water	1		x	
MSA-SW42A-081513	8/15/2013	1209	SW	Water	1		x	
MSA-SW42B-081513	8/15/2013	1213	SW	Water	1		x	
MSA-SW42C-081513	8/15/2013	1217	SW	Water	1		x	
MSA-SW42D-081513	8/15/2013	1222	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:
Relinquished by:	Tera Tech	8/15/13 1500		A2S	8-16-13 7:55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Rochester

1565 Jefferson Road, Building 300, Suite 360
Rochester, NY 14623
Phone: +1 585 288 5380 Fax: +1 585 288 8475

Chain of Custody Record

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact:	Carrier: Fedex	2 of 2 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04793.08
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 1 DAYS			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
PO #	☒ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW37A-081513	8/15/2013	1227	SW	Water	1		x	
MSA-SW37B-081513	8/15/2013	1232	SW	Water	1		x	
MSA-SW37C-081513	8/15/2013	1237	SW	Water	1		x	
MSA-SW37D-081513	8/15/2013	1243	SW	Water	1		x	
MSA-SW38A-081513	8/15/2013	1126	SW	Water	1		x	
MSA-SW38B-081513	8/15/2013	1131	SW	Water	1		x	
MSA-SW38C-081513	8/15/2013	1135	SW	Water	1		x	
MSA-SW38D-081513	8/15/2013	1140	SW	Water	1		x	
MSA-SW39A-081513	8/15/2013	0826	SW	Water	1		x	
MSA-SW39B-081513	8/15/2013	0833	SW	Water	1		x	
MSA-SW39C-081513	8/15/2013	0838	SW	Water	1		x	
MSA-SW39D-081513	8/15/2013	0844	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:
Relinquished by:	Tera Tech	8/15/13 1500		ALS	8-16-13 07:55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

CASE NARRATIVE

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1305995
Project:	MSA Surface Water	**Project Number:**	112IC04036-02
Sample Matrix:	Water	**Date Received:**	8/16/13

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 8/15/13 and received at ALS in good condition at a cooler temperature of 3.3 °C as noted on the cooler receipt and preservation check form. The samples were immediately (or as soon as possible) preserved to a pH of 9.3 – 9.7 and 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. All samples were lab filtered.

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: All samples were analyzed the same day as received and within a couple hours of the client requested 24 hours holding time from sampling time.

All the initial and continuing calibration criteria of 95 – 105 % were met.

The Blank Spike (LCS) recovery was within QC limits.

A Matrix Spike/Matrix Spike duplicate was analyzed on samples MSA-SW43A; MSA-SW45C; MSA-SW42A; and MSA-SW39D. The matrix spike recoveries were all within the 90 – 110 % QC limits except the MS/MSD for MSA-SW39D. This recovery was flagged with an "*". The RPDs were all with 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

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number R13-5995

Cooler received on 8-16-13 by: ME **COURIER:** ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	YES	(NO)
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO (N/A)
5.	Were **Ice** or **Ice packs** present?	(YES)	NO
6.	Where did the bottles originate?	(ALS/ROC)	CLIENT
7.	Soil VOA samples received as:	Bulk Jar	Encore TerraCore Lab5035set (N/A)
8.	Temperature of cooler(s) upon receipt:	2.3°	

Is the temperature within 0° - 6° C?: (Y) N Y N Y N Y N Y N

If No, Explain Below Date/Time Temperatures Taken: 8-16-13 @ 8:10

Thermometer ID: (IR GUN#3) / IR GUN#4 Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition &Client Approval to Run Samples:

All Samples held in storage location R-002 by ME on 8-16-13 at 8:12

5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: [redacted]

Cooler Breakdown: Date: 8/16/13 Time: 1300 by: (ID)

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
≥12	NaOH				
≤2	HNO_3				
≤2	H_2SO_4				
<4	$NaHSO_4$				
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)	
	$Na_2S_2O_3$	-	-		
	Zn Acetа	-	-		
	HCl	*	*		

Sample ID	Vol. Added	Lot Added	Final pH

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 060313-2V

Other Comments:

PC Secondary Review: MD 8/16/13

*significant air bubbles: VOA > 5-6 mm ; WC >1 in. diameter

HOLDTIME

SDG R1305995

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-SW39A-081513	R1305995-033	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
CR6	UG/L	MSA-SW37A-081513	R1305995-025	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW40D-081513	R1305995-016	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW40C-081513	R1305995-015	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW40B-081513	R1305995-014	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW40A-081513	R1305995-013	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW39D-081513	R1305995-036	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
CR6	UG/L	MSA-SW41B-081513	R1305995-018	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW39B-081513	R1305995-034	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW41C-081513	R1305995-019	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW38D-081513	R1305995-032	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW38C-081513	R1305995-031	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW38B-081513	R1305995-030	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW38A-081513	R1305995-029	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW37D-081513	R1305995-028	NM	08/15/2013	08/16/2013	08/16/2013	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-081513	R1305995-027	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW37B-081513	R1305995-026	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW39C-081513	R1305995-035	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW43C-081513	R1305995-003	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW45C-081513	R1305995-011	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW45B-081513	R1305995-010	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW45A-081513	R1305995-009	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW44D-081513	R1305995-008	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW44C-081513	R1305995-007	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW44B-081513	R1305995-006	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW41A-081513	R1305995-017	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW43D-081513	R1305995-004	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW45D-081513	R1305995-012	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW43B-081513	R1305995-002	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW43A-081513	R1305995-001	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW42D-081513	R1305995-024	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW42C-081513	R1305995-023	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW42B-081513	R1305995-022	NM	08/15/2013	08/16/2013	08/16/2013	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-081513	R1305995-021	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW41D-081513	R1305995-020	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
CR6	UG/L	MSA-SW44A-081513	R1305995-005	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/112IC04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Collected: 8/15/13
Date Received: 8/16/13
Date Analyzed: 8/20/13

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW39D-081513
Lab Code: R1305995-036

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

Analyte Name	Sample Result	MSA-SW39D-081513MS Matrix Spike R1305995-036MS Result	Spike Amount	% Rec	MSA-SW39D-081513DMS Duplicate Matrix Spike R1305995-036DMS Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	0.079	0.374	0.400	74 *	0.433	0.400	88 *	90 - 110	15	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/112IC04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Analyzed: 8/20/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1305995-LCS3 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.206	0.200	103	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.

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 354602 **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
RQ1309881-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.51 ppb	10 mL	0.511 ppb	1					8/16/13 11:03:00	N	IV
RQ1309881-10	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 11:15:00	N	IV
RQ1309881-15	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 11:15:00	N	IV
RQ1309881-16	Chromium, Hexavalent, Dissolved	LCS		Water	0.19 ppb	10 mL	0.191 µg/L	1	0.010	0.020	95		8/16/13 11:27:00	N	IV
R1305994-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 11:49:00	N	I
R1305994-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 11:57:00	N	I
R1305994-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 12:05:00	N	I
RQ1309881-06	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.489 ppb	1					8/16/13 12:56:00	N	IV
RQ1309881-11	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 13:07:00	N	IV
R1305995-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.072 µg/L	2	0.020	0.040			8/16/13 14:42:00	N	IV
RQ1309881-01	Chromium, Hexavalent, Dissolved	MS	R1305995-001	Water	0.24 ppb	10 mL	0.475 µg/L	2	0.020	0.040	101		8/16/13 14:50:00	N	IV
RQ1309881-07	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 ppb	10 mL	0.515 ppb	1					8/16/13 14:59:00	N	IV
RQ1309881-12	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 15:11:00	N	IV
RQ1309881-02	Chromium, Hexavalent, Dissolved	DMS	R1305995-001	Water	0.25 ppb	10 mL	0.492 µg/L	2	0.020	0.040	105	4	8/16/13 15:24:00	N	IV
R1305995-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.075 µg/L	2	0.020	0.040			8/16/13 15:32:00	N	IV
R1305995-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.056 µg/L	2	0.020	0.040			8/16/13 15:41:00	N	IV
R1305995-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.105 µg/L	2	0.020	0.040			8/16/13 15:49:00	N	IV
R1305995-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.073 µg/L	2	0.020	0.040			8/16/13 15:58:00	N	IV
R1305995-006	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.071 µg/L	2	0.020	0.040			8/16/13 16:06:00	N	IV
R1305995-007	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.052 µg/L	2	0.020	0.040			8/16/13 16:14:00	N	IV
R1305995-008	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.062 µg/L	2	0.020	0.040			8/16/13 16:23:00	N	IV
R1305995-009	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.088 µg/L	2	0.020	0.040			8/16/13 16:31:00	N	IV
R1305995-010	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.079 µg/L	2	0.020	0.040			8/16/13 16:40:00	N	IV

39000

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 354602 **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
RQ1309881-08	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 ppb	10 mL	0.500 ppb	1					8/16/13 16:48:00	N	IV
RQ1309881-13	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 16:57:00	N	IV
R1305995-011	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.109 µg/L	2	0.020	0.040			8/16/13 17:06:00	N	IV
RQ1309881-03	Chromium, Hexavalent, Dissolved	MS	R1305995-011	Water	0.24 ppb	10 mL	0.483 µg/L	2	0.020	0.040	94		8/16/13 17:14:00	N	IV
RQ1309881-04	Chromium, Hexavalent, Dissolved	DMS	R1305995-011	Water	0.25 ppb	10 mL	0.491 µg/L	2	0.020	0.040	96	2	8/16/13 17:23:00	N	IV
R1305995-012	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.059 µg/L	2	0.020	0.040			8/16/13 17:30:00	N	IV
RQ1309881-09	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 ppb	10 mL	0.499 ppb	1					8/16/13 18:31:00	N	IV
RQ1309881-14	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 18:39:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 354613 **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
RQ1309884-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 ppb	10 mL	0.500 ppb	1					8/16/13 16:48:00	N	IV
RQ1309884-08	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 16:57:00	N	IV
RQ1309884-13	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 16:57:00	N	IV
RQ1309884-14	Chromium, Hexavalent, Dissolved	LCS		Water	0.19 ppb	10 mL	0.191 µg/L	1	0.010	0.020	96		8/16/13 17:38:00	N	IV
R1305995-013	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.087 µg/L	2	0.020	0.040			8/16/13 17:49:00	N	IV
R1305995-014	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.077 µg/L	2	0.020	0.040			8/16/13 17:57:00	N	IV
R1305995-015	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 ppb	10 mL	0.049 µg/L	2	0.020	0.040			8/16/13 18:05:00	N	IV
R1305995-016	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.063 µg/L	2	0.020	0.040			8/16/13 18:14:00	N	IV
R1305995-017	Chromium, Hexavalent, Dissolved	N/A		Water	0.0533 ~~0.11~~ ppb CK 8/20/13	10 mL	0.107 ~~0.213~~ µg/L CK 8/20/13	2	0.020	0.040			8/16/13 18:22:00	N	IV
RQ1309884-04	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 ppb	10 mL	0.499 ppb	1					8/16/13 18:31:00	N	IV
RQ1309884-09	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 18:39:00	N	IV
R1305995-018	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.067 µg/L	2	0.020	0.040			8/16/13 18:47:00	N	IV
R1305995-019	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.071 µg/L	2	0.020	0.040			8/16/13 18:56:00	N	IV
R1305995-020	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.053 µg/L	2	0.020	0.040			8/16/13 19:04:00	N	IV
R1305995-021	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.070 µg/L	2	0.020	0.040			8/16/13 19:13:00	N	IV
RQ1309884-01	Chromium, Hexavalent, Dissolved	MS	R1305995-021	Water	0.25 ppb	10 mL	0.490 µg/L	2	0.020	0.040	105		8/16/13 19:21:00	N	IV
RQ1309884-02	Chromium, Hexavalent, Dissolved	DMS	R1305995-021	Water	0.24 ppb	10 mL	0.486 µg/L	2	0.020	0.040	104	1	8/16/13 19:30:00	N	IV
R1305995-022	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.058 µg/L	2	0.020	0.040			8/16/13 19:37:00	N	IV
R1305995-023	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.096 µg/L	2	0.020	0.040			8/16/13 19:45:00	N	IV
R1305995-024	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.095 µg/L	2	0.020	0.040			8/16/13 19:54:00	N	IV
R1305995-025	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.060 µg/L	2	0.020	0.040			8/16/13 20:02:00	N	IV
RQ1309884-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.51 ppb	10 mL	0.508 ppb	1					8/16/13 20:11:00	N	IV
RQ1309884-10	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 20:20:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

8/16

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 354613 **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
R1305995-026	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.060 µg/L	2	0.020	0.040			8/16/13 20:28:00	N	IV
R1305995-027	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.063 µg/L	2	0.020	0.040			8/16/13 20:37:00	N	IV
R1305995-028	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.056 µg/L	2	0.020	0.040			8/16/13 20:45:00	N	IV
R1305995-029	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.073 µg/L	2	0.020	0.040			8/16/13 20:54:00	N	IV
R1305995-030	Chromium, Hexavalent, Dissolved	N/A		Water	0.05 ppb	10 mL	0.101 µg/L	2	0.020	0.040			8/16/13 21:02:00	N	IV
R1305995-031	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.060 µg/L	2	0.020	0.040			8/16/13 21:10:00	N	IV
R1305995-032	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.055 µg/L	2	0.020	0.040			8/16/13 21:19:00	N	IV
R1305995-033.R01	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			8/16/13 21:27:00	N	IV
R1305995-034	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.070 µg/L	2	0.020	0.040			8/16/13 21:36:00	N	IV
R1305995-035	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.068 µg/L	2	0.020	0.040			8/16/13 21:44:00	N	IV
RQ1309884-06	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 ppb	10 mL	0.497 ppb	1					8/16/13 21:52:00	N	IV
RQ1309884-11	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/16/13 22:01:00	N	IV
R1305995-036.R01	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ppb	10 mL	0.062 µg/L	2	0.020	0.040			8/16/13 22:09:00	N	IV
RQ1309884-07	Chromium, Hexavalent, Dissolved	CCV		Water	2.19 ppb	10 mL	2.19 ppb	1					8/16/13 23:14:00	N	IV
RQ1309884-12	Chromium, Hexavalent, Dissolved	CCB		Water	1.56 ppb	10 mL	1.56 µg/L	1	0.010	0.020			8/16/13 23:23:00	N	IV

00071

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

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Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 354637 **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
RQ1309898-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 ppb	10 mL	0.487 ppb	1					8/20/13 12:05:00	N	IV
RQ1309898-05	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/20/13 12:13:00	N	IV
RQ1309898-07	Chromium, Hexavalent, Dissolved	MB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/20/13 12:13:00	N	IV
RQ1309898-08	Chromium, Hexavalent, Dissolved	LCS		Water	0.21 ppb	10 mL	0.206 µg/L	1	0.010	0.020	103		8/20/13 12:22:00	N	IV
R1305995-033	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 ppb	10 mL	0.040 µg/L U	2	0.020	0.040			8/20/13 12:45:00	N	IV
R1305995-036	Chromium, Hexavalent, Dissolved	N/A		Water	0.04 ppb	10 mL	0.079 µg/L	2	0.020	0.040			8/20/13 12:54:00	N	IV
RQ1309898-01	Chromium, Hexavalent, Dissolved	MS	R1305995-036	Water	0.19 ppb	10 mL	0.374 µg/L	2	0.020	0.040	74*		8/20/13 13:02:00	N	IV
RQ1309898-02	Chromium, Hexavalent, Dissolved	DMS	R1305995-036	Water	0.22 ppb	10 mL	0.433 µg/L	2	0.020	0.040	88*	15	8/20/13 13:11:00	N	IV
RQ1309898-04	Chromium, Hexavalent, Dissolved	CCV		Water	0.48 ppb	10 mL	0.482 ppb	1					8/20/13 13:18:00	N	IV
RQ1309898-06	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 ppb	10 mL	0.020 µg/L U	1	0.010	0.020			8/20/13 13:29:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

08-16-13 IC#8 7199LL/218.6LL Analyst: CWoods Dipets: Phineas Ferb 8/16

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-081613LL	16/08/13 10:01	1.0	7199 LL/218.6 LL
2	STANDARD 2	Calibration Standard	02	8-081613LL	16/08/13 10:09	1.0	7199 LL/218.6 LL
3	STANDARD 3	Calibration Standard	03	8-081613LL	16/08/13 10:18	1.0	7199 LL/218.6 LL
4	STANDARD 4	Calibration Standard	04	8-081613LL	16/08/13 10:26	1.0	7199 LL/218.6 LL
5	STANDARD 5	Calibration Standard	05	8-081613LL	16/08/13 10:35	1.0	7199 LL/218.6 LL
6	STANDARD 6	Calibration Standard	06	8-081613LL	16/08/13 10:43	1.0	7199 LL/218.6 LL
7	STANDARD 7	Calibration Standard	07	8-081613LL	16/08/13 10:52	1.0	7199 LL/218.6 LL
8	ICV	Unknown		8-081613LL	16/08/13 11:03	1.0	7199 LL/218.6 LL
9	ICB	Unknown		8-081613LL	16/08/13 11:15	1.0	7199 LL/218.6 LL
10	LCS	Unknown		8-081613LL	16/08/13 11:27	1.0	7199 LL/218.6 LL
11	LCS	Unknown		8-081613LL	16/08/13 11:35	1.0	7199 LL REPLICATE
12	R1305994-001	Unknown		8-081613LL	16/08/13 11:49	1.0	218.6 LL
13	R1305994-002	Unknown		8-081613LL	16/08/13 11:57	1.0	218.6 LL
14	R1305994-003	Unknown		8-081613LL	16/08/13 12:05	1.0	218.6 LL
15	FILTER BLK	Unknown		8-081613LL	16/08/13 12:14	1.0	218.6 LL
16	R1305822-019	Unknown		8-081613LL	16/08/13 12:23	500.0	7199 LL
17	R1305971-001	Unknown		8-081613LL	16/08/13 12:31	500.0	7199 LL
18	R1305971-002	Unknown		8-081613LL	16/08/13 12:39	500.0	7199 LL
19	R1305822-018	Unknown		8-081613LL	16/08/13 12:48	500.0	7199 LL
20	CCV	Unknown		8-081613LL	16/08/13 12:56	1.0	7199 LL/218.6 LL
21	CCB	Unknown		8-081613LL	16/08/13 13:07	1.0	7199 LL/218.6 LL
22	R1305822-018 MS	Unknown		8-081613LL	16/08/13 13:18	500.0	7199 LL
23	R1305822-018 MSD	Unknown		8-081613LL	16/08/13 13:27	500.0	7199 LL
24	R1305822-019	Unknown		8-081613LL	16/08/13 13:35	500.0	7199 LL - REPLICATE
25	R1305971-001	Unknown		8-081613LL	16/08/13 13:44	500.0	7199 LL - REPLICATE
26	R1305971-002	Unknown		8-081613LL	16/08/13 13:52	500.0	7199 LL - REPLICATE
27	R1305822-018	Unknown		8-081613LL	16/08/13 14:01	500.0	7199 LL - REPLICATE
28	R1305822-018 MS	Unknown		8-081613LL	16/08/13 14:09	500.0	7199 LL - REPLICATE
29	R1305822-018 MSD	Unknown		8-081613LL	16/08/13 14:17	500.0	7199 LL - REPLICATE
30	R1305995-001	Unknown		8-081613LL	16/08/13 14:42	2.0	218.6 LL
31	R1305995-001 MS	Unknown		8-081613LL	16/08/13 14:50	2.0	218.6 LL
32	CCV	Unknown		8-081613LL	16/08/13 14:59	1.0	7199 LL/218.6 LL
33	CCB	Unknown		8-081613LL	16/08/13 15:11	1.0	7199 LL/218.6 LL
34	R1305995-001 MSD	Unknown		8-081613LL	16/08/13 15:24	2.0	218.6 LL
35	R1305995-002	Unknown		8-081613LL	16/08/13 15:32	2.0	218.6 LL

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CK 8/20/13

Reviewed & Approved
By: CK
Date: 8/20/13

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36	R1305995-003	Unknown	8-081613LL	16/08/13 15:41	2.0	218.6 LL
37	R1305995-004	Unknown	8-081613LL	16/08/13 15:49	2.0	218.6 LL
38	R1305995-005	Unknown	8-081613LL	16/08/13 15:58	2.0	218.6 LL
39	R1305995-006	Unknown	8-081613LL	16/08/13 16:06	2.0	218.6 LL
40	R1305995-007	Unknown	8-081613LL	16/08/13 16:14	2.0	218.6 LL
41	R1305995-008	Unknown	8-081613LL	16/08/13 16:23	2.0	218.6 LL
42	R1305995-009	Unknown	8-081613LL	16/08/13 16:31	2.0	218.6 LL
43	R1305995-010	Unknown	8-081613LL	16/08/13 16:40	2.0	218.6 LL
44	CCV	Unknown	8-081613LL	16/08/13 16:48	1.0	7199 LL/218.6 LL
45	CCB	Unknown	8-081613LL	16/08/13 16:57	1.0	7199 LL/218.6 LL
46	R1305995-011	Unknown	8-081613LL	16/08/13 17:06	2.0	218.6 LL
47	R1305995-011 MS	Unknown	8-081613LL	16/08/13 17:14	2.0	218.6 LL
48	R1305995-011 MSD	Unknown	8-081613LL	16/08/13 17:23	2.0	218.6 LL
49	R1305995-012	Unknown	8-081613LL	16/08/13 17:30	2.0	218.6 LL
50	LCS	Unknown	8-081613LL	16/08/13 17:38	1.0	7199 LL/218.6 LL
51	R1305995-013	Unknown	8-081613LL	16/08/13 17:49	2.0	218.6 LL
52	R1305995-014	Unknown	8-081613LL	16/08/13 17:57	2.0	218.6 LL
53	R1305995-015	Unknown	8-081613LL	16/08/13 18:05	2.0	218.6 LL
54	R1305995-016	Unknown	8-081613LL	16/08/13 18:14	2.0	218.6 LL
55	R1305995-017	Unknown	8-081613LL	16/08/13 18:22	2.0	218.6 LL
56	CCV	Unknown	8-081613LL	16/08/13 18:31	1.0	7199 LL/218.6 LL
57	CCB	Unknown	8-081613LL	16/08/13 18:39	1.0	7199 LL/218.6 LL
58	R1305995-018	Unknown	8-081613LL	16/08/13 18:47	2.0	218.6 LL
59	R1305995-019	Unknown	8-081613LL	16/08/13 18:56	2.0	218.6 LL
60	R1305995-020	Unknown	8-081613LL	16/08/13 19:04	2.0	218.6 LL
61	R1305995-021	Unknown	8-081613LL	16/08/13 19:13	2.0	218.6 LL
62	R1305995-021 MS	Unknown	8-081613LL	16/08/13 19:21	2.0	218.6 LL
63	R1305995-021 MSD	Unknown	8-081613LL	16/08/13 19:30	2.0	218.6 LL
64	R1305995-022	Unknown	8-081613LL	16/08/13 19:37	2.0	218.6 LL
65	R1305995-023	Unknown	8-081613LL	16/08/13 19:45	2.0	218.6 LL
66	R1305995-024	Unknown	8-081613LL	16/08/13 19:54	2.0	218.6 LL
67	R1305995-025	Unknown	8-081613LL	16/08/13 20:02	2.0	218.6 LL
68	CCV	Unknown	8-081613LL	16/08/13 20:11	1.0	7199 LL/218.6 LL
69	CCB	Unknown	8-081613LL	16/08/13 20:20	1.0	7199 LL/218.6 LL
70	R1305995-026	Unknown	8-081613LL	16/08/13 20:28	2.0	218.6 LL
71	R1305995-027	Unknown	8-081613LL	16/08/13 20:37	2.0	218.6 LL
72	R1305995-028	Unknown	8-081613LL	16/08/13 20:45	2.0	218.6 LL
73	R1305995-029	Unknown	8-081613LL	16/08/13 20:54	2.0	218.6 LL
74	R1305995-030	Unknown	8-081613LL	16/08/13 21:02	2.0	218.6 LL

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1305995-MB1	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	1	NA	8/16/13 11:15	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1305995-MB2	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	1	NA	8/16/13 16:57	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/112IC04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Collected: 8/15/13
Date Received: 8/16/13
Date Analyzed: 8/16/13

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW43A-081513
Lab Code: R1305995-001

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

Analyte Name	Sample Result	MSA-SW43A-081513MS Matrix Spike R1305995-001MS Result	Spike Amount	% Rec	MSA-SW43A-081513DMS Duplicate Matrix Spike R1305995-001DMS Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	0.072	0.475	0.400	101	0.492	0.400	105	90 - 110	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/112IC04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Collected: 8/15/13
Date Received: 8/16/13
Date Analyzed: 8/16/13

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW45C-081513
Lab Code: R1305995-011

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

		MSA-SW45C-081513MS Matrix Spike R1305995-011MS			MSA-SW45C-081513DMS Duplicate Matrix Spike R1305995-011DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Chromium, Hexavalent, Dissolved	0.109	0.483	0.400	94	0.491	0.400	96	90 - 110	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/1121C04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Collected: 8/15/13
Date Received: 8/16/13
Date Analyzed: 8/16/13

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW42A-081513
Lab Code: R1305995-021

Units: µg/L
Basis: NA

Analytical Method: 218.6 LL

		MSA-SW42A-081513MS Matrix Spike R1305995-021MS			MSA-SW42A-081513DMS Duplicate Matrix Spike R1305995-021DMS					
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	0.070	0.490	0.400	105	0.486	0.400	104	90 - 110	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
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/112IC04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Analyzed: 8/16/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

		Lab Control Sample R1305995-LCS1			
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**
Chromium, Hexavalent, Dissolved	218.6 LL	0.191	0.200	95	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/112IC04036 - 02
Sample Matrix: Water

Service Request: R1305995
Date Analyzed: 8/16/13

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1305995-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6 LL	0.191	0.200	96	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 ASP/CLP Batching Form/Login Sheet

Client Proj #: 112IC04036 - 02	Batch Complete: Yes	Date Revised:
Submission: R1305995	Diskette Requested: No	Date Due: 8/19/13
Client: Tetra Tech NUS, Inc.	Date: 8/20/13	Protocol: MCAWW
Client Rep: MPERRY	Custody Seal: Present/Absent:	Shipping No.:
Project: MSA Surface Water	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1305995-001	MSA-SW43A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-002	MSA-SW43B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-003	MSA-SW43C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-004	MSA-SW43D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-005	MSA-SW44A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-006	MSA-SW44B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-007	MSA-SW44C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-008	MSA-SW44D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-009	MSA-SW45A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-010	MSA-SW45B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-011	MSA-SW45C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-012	MSA-SW45D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-013	MSA-SW40A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-014	MSA-SW40B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-015	MSA-SW40C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-016	MSA-SW40D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-017	MSA-SW41A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-018	MSA-SW41B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-019	MSA-SW41C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-020	MSA-SW41D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-021	MSA-SW42A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-022	MSA-SW42B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-023	MSA-SW42C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-024	MSA-SW42D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-025	MSA-SW37A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-026	MSA-SW37B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-027	MSA-SW37C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-028	MSA-SW37D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-029	MSA-SW38A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-030	MSA-SW38B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-031	MSA-SW38C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-032	MSA-SW38D-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-033	MSA-SW39A-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-034	MSA-SW39B-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-035	MSA-SW39C-081513	Water	218.6 LL	8/15/13	8/16/13			
R1305995-036	MSA-SW39D-081513	Water	218.6 LL	8/15/13	8/16/13			

Folder Comments:

08-20-13 IC#8 218.6LL Analyst: Woods Pipets: Phineas FCRB

Injection Number	Injection Name	Type	Level	Processing Method	Inject Time	Dilution	Comment
1	STANDARD 1	Calibration Standard	01	8-082013LL	20/08/13 10:59	1.0	218.6 LL
2	STANDARD 2	Calibration Standard	02	8-082013LL	20/08/13 11:07	1.0	218.6 LL
3	STANDARD 3	Calibration Standard	03	8-082013LL	20/08/13 11:15	1.0	218.6 LL
4	STANDARD 4	Calibration Standard	04	8-082013LL	20/08/13 11:24	1.0	218.6 LL
5	STANDARD 5	Calibration Standard	05	8-082013LL	20/08/13 11:32	1.0	218.6 LL
6	STANDARD 6	Calibration Standard	06	8-082013LL	20/08/13 11:41	1.0	218.6 LL
7	STANDARD 7	Calibration Standard	07	8-082013LL	20/08/13 11:49	1.0	218.6 LL
8	ICV	Unknown		8-082013LL	20/08/13 12:05	1.0	218.6 LL
9	ICB	Unknown		8-082013LL	20/08/13 12:13	1.0	218.6 LL
10	LCS	Unknown		8-082013LL	20/08/13 12:22	1.0	218.6 LL
11	R1305995-033	Unknown		8-082013LL	20/08/13 12:45	2.0	218.6 LL
12	R1305995-036	Unknown		8-082013LL	20/08/13 12:54	2.0	218.6 LL
13	R1305995-036 MS	Unknown		8-082013LL	20/08/13 13:02	2.0	218.6 LL
14	R1305995-036 MSD	Unknown		8-082013LL	20/08/13 13:11	2.0	218.6 LL
15	CCV	Unknown		8-082013LL	20/08/13 13:18	1.0	218.6 LL
16	CCB	Unknown		8-082013LL	20/08/13 13:29	1.0	218.6 LL

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Reviewed & Approved
By: CK
Date: 8/20/13

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1305995
Project:	MSA Surface Water/112IC04036 - 02	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1305995-MB3	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6 LL	0.020	U	µg/L	0.020	1	NA	8/20/13 12:13	

75	R1305995-031	Unknown	8-081613LL	16/08/13 21:10	2.0	218.6 LL
76	R1305995-032	Unknown	8-081613LL	16/08/13 21:19	2.0	218.6 LL
77	R1305995-033	Unknown	8-081613LL	16/08/13 21:27	2.0	218.6 LL
78	R1305995-034	Unknown	8-081613LL	16/08/13 21:36	2.0	218.6 LL
79	R1305995-035	Unknown	8-081613LL	16/08/13 21:44	2.0	218.6 LL
80	CCV	Unknown	8-081613LL	16/08/13 21:52	1.0	7199 LL/218.6 LL
81	CCB	Unknown	8-081613LL	16/08/13 22:01	1.0	7199 LL/218.6 LL
82	R1305995-036	Unknown	8-081613LL	16/08/13 22:09	2.0	218.6 LL
83	LCS	Unknown	8-081613LL	16/08/13 22:17	1.0	7199 LL - REPLICATE
84	R1306012-001	Unknown	8-081613LL	16/08/13 22:26	500.0	7199 - LL
85	R1306012-001	Unknown	8-081613LL	16/08/13 22:35	500.0	7199 LL - REPLICATE
86	R1306012-002	Unknown	8-081613LL	16/08/13 22:42	500.0	7199 - LL
87	R1306012-002	Unknown	8-081613LL	16/08/13 22:51	500.0	7199 LL - REPLICATE
88	R1306012-003	Unknown	8-081613LL	16/08/13 22:58	500.0	7199 - LL
89	R1306012-003	Unknown	8-081613LL	16/08/13 23:07	500.0	7199 LL - REPLICATE
90	CCV	Unknown	8-081613LL	16/08/13 23:14	1.0	7199 LL/218.6 LL
91	CCB	Unknown	8-081613LL	16/08/13 23:23	1.0	7199 LL/218.6 LL

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/112IC04036 - 02

Service Request: R1305995

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	354602	RQ1309881-05	8/16/13 11:03	0.500	0.511	102	95 - 105
CCV2	354602	RQ1309881-06	8/16/13 12:56	0.500	0.489	98	95 - 105
CCV3	354602	RQ1309881-07	8/16/13 14:59	0.500	0.515	103	95 - 105
CCV4	354602	RQ1309881-08	8/16/13 16:48	0.500	0.500	100	95 - 105
CCV5	354613	RQ1309884-03	8/16/13 16:48	0.500	0.500	100	95 - 105
CCV6	354602	RQ1309881-09	8/16/13 18:31	0.500	0.499	100	95 - 105
CCV7	354613	RQ1309884-04	8/16/13 18:31	0.500	0.499	100	95 - 105
CCV8	354613	RQ1309884-05	8/16/13 20:11	0.500	0.508	102	95 - 105
CCV9	354613	RQ1309884-06	8/16/13 21:52	0.500	0.497	99	95 - 105
CCV10	354613	RQ1309884-07	8/16/13 23:14	0.500	2.19	439 *	95 - 105
CCV11	354637	RQ1309898-03	8/20/13 12:05	0.500	0.487	97	95 - 105
CCV12	354637	RQ1309898-04	8/20/13 13:18	0.500	0.482	96	95 - 105

* Doesn't Bracket

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water/112IC04036 - 02

Service Request: R1305995

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 LL

Units: µg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	Result	Q
CCB1	354602	RQ1309881-10	8/16/13 11:15	0.020	0.020	U
CCB2	354602	RQ1309881-11	8/16/13 13:07	0.020	0.020	U
CCB3	354602	RQ1309881-12	8/16/13 15:11	0.020	0.020	U
CCB4	354602	RQ1309881-13	8/16/13 16:57	0.020	0.020	U
CCB5	354613	RQ1309884-08	8/16/13 16:57	0.020	0.020	U
CCB6	354602	RQ1309881-14	8/16/13 18:39	0.020	0.020	U
CCB7	354613	RQ1309884-09	8/16/13 18:39	0.020	0.020	U
CCB8	354613	RQ1309884-10	8/16/13 20:20	0.020	0.020	U
CCB9	354613	RQ1309884-11	8/16/13 22:01	0.020	0.020	U
CCB10	354613	RQ1309884-12	8/16/13 23:23	0.020	1.56	
CCB11	354637	RQ1309898-05	8/20/13 12:13	0.020	0.020	U
CCB12	354637	RQ1309898-06	8/20/13 13:29	0.020	0.020	U

Doesn't affect samples reported

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **SEPTEMBER 20, 2013**

FROM: **J. KALINYAK** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MIDDLE STATE AIRPORT (MSA)
SAMPLE DELIVERY GROUP (SDG) 240-28011-1

SAMPLES: 41 / Aqueous / VOC

EL-SW01A-081513	EL-SW01B-081513	EL-SW01C-081513
EL-SW01D-081513	MSA-SW37A-081513	MSA-SW37B-081513
MSA-SW37C-081513	MSA-SW37D-081513	MSA-SW38A-081513
MSA-SW38B-081513	MSA-SW38C-081513	MSA-SW38D-081513
MSA-SW39A-081513	MSA-SW39B-081513	MSA-SW39C-081513
MSA-SW39D-081513	MSA-SW40A-081513	MSA-SW40B-081513
MSA-SW40C-081513	MSA-SW40D-081513	MSA-SW41A-081513
MSA-SW41B-081513	MSA-SW41C-081513	MSA-SW41D-081513
MSA-SW42A-081513	MSA-SW42B-081513	MSA-SW42C-081513
MSA-SW42D-081513	MSA-SW43A-081513	MSA-SW43B-081513
MSA-SW43C-081513	MSA-SW43D-081513	MSA-SW44A-081513
MSA-SW44B-081513	MSA-SW44C-081513	MSA-SW44D-081513
MSA-SW45A-081513	MSA-SW45B-081513	MSA-SW45C-081513
MSA-SW45D-081513	TB-081513	

Overview

The sample set for Lockheed MSA, SDG 240-28011-1, consisted of forty-one (41) aqueous samples including one (1) aqueous trip blank sample. All aqueous samples were analyzed for volatile organic compounds (VOC) as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on August 15, 2013 and analyzed by TestAmerica Laboratories, Inc., North Canton OH for the analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, analytical and reporting protocols.

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

Major Problems

- The VOC initial calibration average relative response factors (RRF) were less than the 0.05 criteria for tert-butyl alcohol and vinyl acetate on instrument A3UX17 on 08/17/13. The continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were less than the 0.05 criteria for instrument A3UX17 on 08/19/13 @ 15:00, on 08/20/13 @ 01:45, and on 08/20/13 @ 13:40.
  Affected Samples: All samples
  Action: The affected sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR).

- The matrix spike (MS) and MS duplicate (MSD) percent recoveries (%Rs) for 2-chloroethyl vinyl ether were less than the quality control limit and <10% at 0% for spiked sample MSA-SW40D-081513.

  Affected Sample: MSA-SW40D-081513

  Actions: Due to the lack of recovery of the analyte in the spiked sample, the sample non-detected 2-chloroethyl vinyl ether result was qualified rejected, (UR).

Minor Problems

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The following laboratory VOC contaminants were detected in the method blanks and the trip blank sample at the following maximum concentration for VOCs.

Analytes	Maximum Conc. µg/l	Action Level µg/l
Acetone [1]	1.7	17.0
1,2,3-Trichlorobenzene [2]	0.200	1.000

  [1] Trip blank TB-081513 result affecting all SDG samples.

  [2] Method blank MB 240-98083/6 affecting samples MSA-SW40D-081513, MSA-SW41A-081513, MSA-SW41B-081513, MSA-SW41C-081513, MSA-SW41D-081513, MSA-SW42A-081513, MSA-SW42B-081513, MSA-SW42C-081513, MSA-SW42D-081513, MSA-SW43A-081513, MSA-SW43B-081513, MSA-SW43C-081513, MSA-SW43D-081513, MSA-SW44A-081513, MSA-SW44B-081513, MSA-SW44C-081513, MSA-SW44D-081513, MSA-SW45A-081513, MSA-SW45B-081513, and MSA-SW45C-081513.

  An action level of ten times the maximum level for acetone and five times the maximum level for 1,2,3-trichlorobenzene 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 sample results less than the action level were qualified non-detected, (B), for blank contamination. The trip blank sample results were not qualified for method blank contamination.

- The VOC CCV percent differences (%Ds) were greater than the 20% and less than the 50% quality control limit for naphthalene and 1,2,3-trichlorobenzene for instrument A3UX17 on 08/19/13 @ 15:00.

  Affected Samples:

MSA-SW37A-081513	MSA-SW37B-081513	MSA-SW37C-081513
MSA-SW37D-081513	MSA-SW38A-081513	MSA-SW38B-081513
MSA-SW38C-081513	MSA-SW38D-081513	MSA-SW39A-081513
MSA-SW39B-081513	MSA-SW39C-081513	MSA-SW39D-081513
MSA-SW40A-081513	MSA-SW40B-081513	MSA-SW40C-081513

  Action: The positive naphthalene result for sample MSA-SW37A-081513 was qualified estimated, (J). The remaining samples had non-detected results for naphthalene and 1,2,3-trichlorobenzene which were not qualified.

- The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for chloroethane, vinyl acetate, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX17 on 08/20/13 @ 01:45.

  Affected Samples:

MSA-SW40D-081513	MSA-SW41A-081513	
MSA-SW41B-081513	MSA-SW41C-081513	MSA-SW41D-081513
MSA-SW42A-081513	MSA-SW42B-081513	MSA-SW42C-081513
MSA-SW42D-081513	MSA-SW43A-081513	MSA-SW43B-081513
MSA-SW43C-081513	MSA-SW43D-081513	MSA-SW44A-081513
MSA-SW44B-081513	MSA-SW44C-081513	MSA-SW44D-081513
MSA-SW45A-081513	MSA-SW45B-081513	MSA-SW45C-081513

  Action: The positive naphthalene result for sample MSA-SW45A-081513 was qualified estimated, (J). The remaining samples had non-detected results for chloroethane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene which were not qualified. The sample non-detected vinyl acetate results were rejected for RRF criteria non-compliances and no further action was necessary.

Notes

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for tert-butyl alcohol, vinyl acetate, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX17 on 08/20/13 @ 13:40.

Affected Samples:

MSA-SW45D-081513	EL-SW01A-081513	EL-SW01B-081513
EL-SW01C-081513	EL-SW01D-081513	TB-081513

Action: The samples had non-detected results for 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene which were not qualified. The sample non-detected tert-butyl alcohol and vinyl acetate results were rejected for RRF criteria non-compliances and no further action was necessary.

The MS and MSD %Rs and the MS/MSD VOC analyte RPDs were non-compliant for many VOC analytes for a spiked sample from another SDG (SDG 240-28014-B-3). No validation action was taken as the sample was not from this SDG.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC tert-butyl alcohol and vinyl acetate non-detected sample results were rejected due to initial calibration average RRF and CCV RRF criteria non-compliances. Sample VOC results were qualified for blank contamination. VOC sample results were qualified for CCV %D non-compliances.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J). A 2-chloroethyl vinyl ether result was qualified rejected for poor MS and MSD %Rs.

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

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 QUALIFICATION CODE (QUAL CODE)

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 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04793	NSAMPLE	EL-SW01A-081513			EL-SW01B-081513			EL-SW01C-081513			EL-SW01D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-37			240-28011-38			240-28011-39			240-28011-40		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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	0.15	J	P	0.12	J	P	0.12	U		0.3	J	P
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	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	0.24	J	P	0.21	J	P	0.13	U		0.4	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	U		0.41	U		0.41	U	
CARBON DISULFIDE	0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW37A-081513			MSA-SW37B-081513			MSA-SW37C-081513			MSA-SW37D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-1			240-28011-2			240-28011-3			240-28011-4		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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	0.2	J	P	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	0.44	J	P	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	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		1.5	B	B	2.1	B	B
BENZENE	0.5	J	P	0.18	J	P	0.16	J	P	0.15	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	U		0.41	U		0.41	U	
CARBON DISULFIDE	0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW38A-081513			MSA-SW38B-081513			MSA-SW38C-081513			MSA-SW38D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-5			240-28011-6			240-28011-7			240-28011-8		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.24	J	P
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	U		0.57	U		0.57	U		0.57	J	P
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		4	B	B
BENZENE		0.24	J	P	0.14	J	P	0.14	J	P	0.32	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	U		0.41	U		0.41	U	
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW39A-081513			MSA-SW39B-081513			MSA-SW39C-081513			MSA-SW39D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-9			240-28011-10			240-28011-11			240-28011-12		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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	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	
CARBON DISULFIDE		0.21	J	P	0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW40A-081513			MSA-SW40B-081513			MSA-SW40C-081513			MSA-SW40D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-13			240-28011-14			240-28011-15			240-28011-16		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.21	J	P	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		0.49	J	P	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	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	UR	D
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	1.3	B	B	1.1	U		1.1	U		1.1	U	
BENZENE	0.13	U		0.13	U		0.51	J	P	0.22	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	U		0.41	U		0.41	U	
CARBON DISULFIDE	0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW41A-081513			MSA-SW41B-081513			MSA-SW41C-081513			MSA-SW41D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-17			240-28011-18			240-28011-19			240-28011-20		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.16	J	P	0.0059	U		0.22	J	P	0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.38	J	P	0.12	U		0.51	J	P	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	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		0.42	J	P	0.18	J	P	0.42	J	P	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	U		0.41	U		0.41	U	
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW42A-081513			MSA-SW42B-081513			MSA-SW42C-081513			MSA-SW42D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-21			240-28011-22			240-28011-23			240-28011-24		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.14	J	P
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.29	J	P	0.12	U		0.12	U		0.33	J	P
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	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		2.7	B	B	1.1	U		1.1	U		2.3	B	B
BENZENE		0.42	J	P	0.13	J	P	0.15	J	P	0.46	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	U		0.41	U		0.41	U	
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW43A-081513			MSA-SW43B-081513			MSA-SW43C-081513			MSA-SW43D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-25			240-28011-26			240-28011-27			240-28011-28		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.25	J	P
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		0.3	J	P	0.64	J	P
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	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		0.21	J	P	0.19	J	P	0.43	J	P	0.62	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	U		0.41	U		0.41	U	
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW44A-081513			MSA-SW44B-081513			MSA-SW44C-081513			MSA-SW44D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-29			240-28011-30			240-28011-31			240-28011-32		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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	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		0.15	J	P	0.13	J	P	0.19	J	P	0.15	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	U		0.41	U		0.41	U	
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW45A-081513			MSA-SW45B-081513			MSA-SW45C-081513			MSA-SW45D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-33			240-28011-34			240-28011-35			240-28011-36		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.26	J	P	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		0.57	J	P	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	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		0.66	J	P	0.16	J	P	0.14	J	P	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	
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U		0.13	U	

PROJ_NO: 04793	NSAMPLE	TB-081513		
SDG: 240-28011-1	LAB_ID	240-28011-41		
FRACTION: OV	SAMP_DATE	8/15/2013		
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	U	
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	U	
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	U	
1,2-DIBROMOETHANE		0.24	U	
1,2-DICHLOROBENZENE		0.13	U	
1,2-DICHLOROETHANE		0.22	U	
1,2-DICHLOROPROPANE		0.18	U	
1,3-DICHLOROBENZENE		0.14	U	
1,3-DICHLOROPROPANE		0.16	U	
1,4-DICHLOROBENZENE		0.13	U	
2,2-DICHLOROPROPANE		0.13	U	
2-BUTANONE		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U	
2-CHLOROTOLUENE		0.11	U	
2-HEXANONE		0.41	U	
4-CHLOROTOLUENE		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U	
4-METHYL-2-PENTANONE		0.32	U	
ACETONE		1.7	J	P
BENZENE		0.13	U	
BROMOBENZENE		0.13	U	
BROMOCHLOROMETHANE		0.29	U	
BROMODICHLOROMETHANE		0.15	U	
BROMOFORM		0.64	U	
BROMOMETHANE		0.41	U	
CARBON DISULFIDE		0.13	U	

PROJ_NO: 04793	NSAMPLE	EL-SW01A-081513			EL-SW01B-081513			EL-SW01C-081513			EL-SW01D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-37			240-28011-38			240-28011-39			240-28011-40		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		0.33	J	P	0.17	U		0.29	J	P	0.22	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		0.19	J	P
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		0.29	J	P	0.24	U		0.24	U		0.58	J	P
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		0.17	J	P	0.14	U		0.14	U		0.31	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.66	J	P	0.5	J	P	0.13	U		1.3		
TOTAL XYLENES		0.46	J	P	0.14	U		0.14	U		0.89	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		0.6	J	P	0.6	J	P	0.55	J	P	0.37	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW37A-081513			MSA-SW37B-081513			MSA-SW37C-081513			MSA-SW37D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-1			240-28011-2			240-28011-3			240-28011-4		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		0.3	J	P	0.28	J	P	0.28	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		0.25	J	P	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		0.84	J	P	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	J	CP	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		0.44	J	P	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		1.7			0.2	J	P	0.13	U		0.13	U	
TOTAL XYLENES		1.3	J	P	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		0.44	J	P	0.51	J	P	0.48	J	P	0.44	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW38A-081513			MSA-SW38B-081513			MSA-SW38C-081513			MSA-SW38D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-5			240-28011-6			240-28011-7			240-28011-8		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		1.4			0.88	J	P	0.73	J	P	0.57	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		0.54	J	P
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		0.27	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.36	J	P	0.13	U		0.13	U		1.1		
TOTAL XYLENES		0.14	U		0.14	U		0.14	U		0.81	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		1.6			2			1.4			1.7		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		3.2			0.47	J	P	0.39	J	P	0.31	J	P

PROJ_NO: 04793	NSAMPLE	MSA-SW39A-081513			MSA-SW39B-081513			MSA-SW39C-081513			MSA-SW39D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-9			240-28011-10			240-28011-11			240-28011-12		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		0.69	J	P	0.5	J	P	0.76	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
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	J	P
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		0.3	J	P	1.6			1.1			1.5		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.37	J	P	0.25	J	P	0.38	J	P

PROJ_NO: 04793	NSAMPLE	MSA-SW40A-081513			MSA-SW40B-081513			MSA-SW40C-081513			MSA-SW40D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-13			240-28011-14			240-28011-15			240-28011-16		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		0.97	J	P	0.37	J	P	0.17	U		0.26	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		0.26	J	P	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		0.94	J	P	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		0.48	J	P	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		1.9			0.29	J	P
TOTAL XYLENES		0.14	U		0.14	U		1.4	J	P	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		0.41	J	P	0.51	J	P	0.48	J	P	0.44	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		1.5			0.31	J	P	0.22	J	P	0.22	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW41A-081513			MSA-SW41B-081513			MSA-SW41C-081513			MSA-SW41D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-17			240-28011-18			240-28011-19			240-28011-20		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		1.8			0.47	J	P	0.17	U		0.39	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		0.2	J	P	0.17	U		0.22	J	P	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		0.7	J	P	0.24	U		0.8	J	P	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		0.35	J	P	0.14	U		0.42	J	P	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		1.3			0.29	J	P	1.6			0.13	U	
TOTAL XYLENES		1.1	J	P	0.14	U		1.2	J	P	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		3.2			0.78	J	P	0.61	J	P	0.75	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		1.1			0.3	J	P	0.23	J	P	0.28	J	P

PROJ_NO: 04793	NSAMPLE	MSA-SW42A-081513			MSA-SW42B-081513			MSA-SW42C-081513			MSA-SW42D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-21			240-28011-22			240-28011-23			240-28011-24		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		1.5			0.17	U		0.41	J	P	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		0.2	J	P
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		0.55	J	P	0.24	U		0.24	U		0.72	J	P
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		0.29	J	P	0.14	U		0.14	U		0.38	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		1.2			0.13	U		0.13	U		1.6		
TOTAL XYLENES		0.84	J	P	0.14	U		0.14	U		1.1	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		0.44	J	P	0.45	J	P	0.57	J	P	0.48	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		2.6			0.31	J	P	0.29	J	P	0.22	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW43A-081513			MSA-SW43B-081513			MSA-SW43C-081513			MSA-SW43D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-25			240-28011-26			240-28011-27			240-28011-28		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		3.4			0.54	J	P	0.39	J	P	0.44	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	J	P	0.31	J	P
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		0.67	J	P	1.1	J	P
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		0.32	J	P	0.56	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.28	J	P	0.3	J	P	1.3			2.2		
TOTAL XYLENES		0.14	U		0.14	U		0.99	J	P	1.7	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		4.9			0.93	J	P	0.7	J	P	0.75	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		1.1			0.38	J	P	0.29	J	P	0.3	J	P

PROJ_NO: 04793	NSAMPLE	MSA-SW44A-081513			MSA-SW44B-081513			MSA-SW44C-081513			MSA-SW44D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-29			240-28011-30			240-28011-31			240-28011-32		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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			0.75	J	P	0.77	J	P	0.5	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.28	J	P	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		1.8			1.4			1.5			1		
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.51			0.46	J	P	0.43	J	P	0.33	J	P

PROJ_NO: 04793	NSAMPLE	MSA-SW45A-081513			MSA-SW45B-081513			MSA-SW45C-081513			MSA-SW45D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-33			240-28011-34			240-28011-35			240-28011-36		
FRACTION: OV	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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 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		1.2			0.66	J	P	0.17	U		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		0.33	J	P	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		1.1	J	P	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		0.3	J	CP	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		0.59	J	P	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	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		2.5			0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		1.7	J	P	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		2.5			1.3			0.84	J	P	0.71	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.61			0.34	J	P	0.22	U		0.22	U	

PROJ_NO: 04793	NSAMPLE	TB-081513
SDG: 240-28011-1	LAB_ID	240-28011-41
FRACTION: OV	SAMP_DATE	8/15/2013
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
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	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
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	3.9	UR	C
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	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	
VINYL ACETATE	0.19	UR	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01A-081513 | Lab Sample ID: 240-28011-37

Matrix: Water | Lab File ID: UXR7090.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 20:55

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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	0.15	J	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	0.24	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01A-081513 Lab Sample ID: 240-28011-37

Matrix: Water Lab File ID: UXR7090.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:00

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 20:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 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	0.29	J	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	0.17	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	0.66	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	0.60	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01A-081513 Lab Sample ID: 240-28011-37

Matrix: Water Lab File ID: UXR7090.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:00

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 20:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.46	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	87		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01B-081513 Lab Sample ID: 240-28011-38

Matrix: Water Lab File ID: UXR7091.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:07

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 21:17

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.: 98201 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	0.12	J	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	0.21	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01B-081513 | Lab Sample ID: 240-28011-38

Matrix: Water | Lab File ID: UXR7091.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 21:17

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.: 98201 | 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	0.50	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	0.60	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01B-081513 | Lab Sample ID: 240-28011-38

Matrix: Water | Lab File ID: UXR7091.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 21:17

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.: 98201 | 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)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01C-081513 | Lab Sample ID: 240-28011-39

Matrix: Water | Lab File ID: UXR7092.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:14

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 21:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01C-081513 | Lab Sample ID: 240-28011-39

Matrix: Water | Lab File ID: UXR7092.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:14

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 21:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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	0.29	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01C-081513 | Lab Sample ID: 240-28011-39

Matrix: Water | Lab File ID: UXR7092.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:14

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 21:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01D-081513 Lab Sample ID: 240-28011-40

Matrix: Water Lab File ID: UXR7093.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:17

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 22:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 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	0.30	J	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	0.40	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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01D-081513 | Lab Sample ID: 240-28011-40

Matrix: Water | Lab File ID: UXR7093.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:17

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:01

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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	0.19	J	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	0.58	J	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	0.31	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	1.3		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.: 240-28011-1

SDG No.:

Client Sample ID: EL-SW01D-081513 Lab Sample ID: 240-28011-40

Matrix: Water Lab File ID: UXR7093.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:17

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 22:01

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.89	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37A-081513 Lab Sample ID: 240-28011-1

Matrix: Water Lab File ID: UXR7022.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:27

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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	0.20	J	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	0.44	J	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	0.50	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37A-081513 Lab Sample ID: 240-28011-1

Matrix: Water Lab File ID: UXR7022.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:27

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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	0.25	J	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	0.84	J	2.0	0.24
91-20-3	Naphthalene	0.24	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	0.44	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	1.7		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	0.44	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37A-081513 | Lab Sample ID: 240-28011-1

Matrix: Water | Lab File ID: UXR7022.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:27

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 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.: 98060 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.3	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37B-081513 Lab Sample ID: 240-28011-2

Matrix: Water Lab File ID: UXR7023.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:32

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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	0.18	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37B-081513 Lab Sample ID: 240-28011-2

Matrix: Water Lab File ID: UXR7023.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:32

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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	0.20	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	0.51	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37B-081513 Lab Sample ID: 240-28011-2

Matrix: Water Lab File ID: UXR7023.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:32

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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)	94		63-129
460-00-4	4-Bromofluorobenzene (Surr)	92		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37C-081513 | Lab Sample ID: 240-28011-3

Matrix: Water | Lab File ID: UXR7024.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:37

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 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.: 98060 | 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	1.5	J	5.0	1.1
71-43-2	Benzene	0.16	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37C-081513 Lab Sample ID: 240-28011-3

Matrix: Water Lab File ID: UXR7024.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:37

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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	0.28	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37C-081513 Lab Sample ID: 240-28011-3

Matrix: Water Lab File ID: UXR7024.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:37

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	89		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37D-081513 Lab Sample ID: 240-28011-4

Matrix: Water Lab File ID: UXR7025.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:43

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 17:58

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	2.1	J	5.0	1.1
71-43-2	Benzene	0.15	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37D-081513 | Lab Sample ID: 240-28011-4

Matrix: Water | Lab File ID: UXR7025.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 17:58

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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	0.28	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	0.44	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW37D-081513 Lab Sample ID: 240-28011-4

Matrix: Water Lab File ID: UXR7025.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:43

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 17:58

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	87		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38A-081513 | Lab Sample ID: 240-28011-5

Matrix: Water | Lab File ID: UXR7026.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:26

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:21

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.: 98060 | 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	0.24	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38A-081513 Lab Sample ID: 240-28011-5

Matrix: Water Lab File ID: UXR7026.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:26

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:21

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.: 98060 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	1.4		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	0.36	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	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	3.2		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38A-081513 | Lab Sample ID: 240-28011-5

Matrix: Water | Lab File ID: UXR7026.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:26

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:21

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.: 98060 | 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)	87		66-117
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38B-081513 Lab Sample ID: 240-28011-6

Matrix: Water Lab File ID: UXR7027.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:31

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:43

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.: 98060 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38B-081513 | Lab Sample ID: 240-28011-6

Matrix: Water | Lab File ID: UXR7027.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:31

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 18:43

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.: 98060 | 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	0.88	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	2.0		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	0.47	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38B-081513 Lab Sample ID: 240-28011-6

Matrix: Water Lab File ID: UXR7027.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:31

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 18:43

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.: 98060 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)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	89		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38C-081513 | Lab Sample ID: 240-28011-7

Matrix: Water | Lab File ID: UXR7028.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:05

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38C-081513 Lab Sample ID: 240-28011-7

Matrix: Water Lab File ID: UXR7028.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:05

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.73	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	0.39	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38C-081513 | Lab Sample ID: 240-28011-7

Matrix: Water | Lab File ID: UXR7028.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:05

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38D-081513 Lab Sample ID: 240-28011-8

Matrix: Water Lab File ID: UXR7029.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.24	J	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	0.57	J	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	4.0	J	5.0	1.1
71-43-2	Benzene	0.32	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38D-081513 Lab Sample ID: 240-28011-8

Matrix: Water Lab File ID: UXR7029.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:40

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.54	J	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	0.27	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	1.1		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	1.7		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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW38D-081513 | Lab Sample ID: 240-28011-8

Matrix: Water | Lab File ID: UXR7029.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:40

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:27

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.81	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	87		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39A-081513 | Lab Sample ID: 240-28011-9

Matrix: Water | Lab File ID: UXR7030.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:26

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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	0.21	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39A-081513 Lab Sample ID: 240-28011-9

Matrix: Water Lab File ID: UXR7030.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:26

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 19:50

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.30	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39A-081513 | Lab Sample ID: 240-28011-9

Matrix: Water | Lab File ID: UXR7030.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:26

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 19:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	88		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39B-081513 Lab Sample ID: 240-28011-10

Matrix: Water Lab File ID: UXR7031.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:33

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 20:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39B-081513 | Lab Sample ID: 240-28011-10

Matrix: Water | Lab File ID: UXR7031.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:33

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:12

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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	0.69	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	1.6		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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39B-081513 | Lab Sample ID: 240-28011-10

Matrix: Water | Lab File ID: UXR7031.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:33

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:12

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	87		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39C-081513 Lab Sample ID: 240-28011-11

Matrix: Water Lab File ID: UXR7032.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:38

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 20:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39C-081513 Lab Sample ID: 240-28011-11

Matrix: Water Lab File ID: UXR7032.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:38

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 20:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.50	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	1.1		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	0.25	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39C-081513 | Lab Sample ID: 240-28011-11

Matrix: Water | Lab File ID: UXR7032.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:38

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:35

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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)	84		66-117
1868-53-7	Dibromofluoromethane (Surr)	87		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39D-081513 | Lab Sample ID: 240-28011-12

Matrix: Water | Lab File ID: UXR7033.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:57

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39D-081513 | Lab Sample ID: 240-28011-12

Matrix: Water | Lab File ID: UXR7033.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:57

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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	0.76	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	0.13	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	1.5		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	0.38	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW39D-081513 | Lab Sample ID: 240-28011-12

Matrix: Water | Lab File ID: UXR7033.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:44

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 20:57

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	89		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40A-081513 | Lab Sample ID: 240-28011-13

Matrix: Water | Lab File ID: UXR7034.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:46

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 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.: 98060 | 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	1.3	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40A-081513 | Lab Sample ID: 240-28011-13

Matrix: Water | Lab File ID: UXR7034.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:46

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 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.: 98060 | 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	0.97	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	0.41	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	1.5		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40A-081513 Lab Sample ID: 240-28011-13

Matrix: Water Lab File ID: UXR7034.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:46

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40B-081513 | Lab Sample ID: 240-28011-14

Matrix: Water | Lab File ID: UXR7035.D

Analysis Method: 8260B | Date Collected: 08/15/2013 11:58

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 21:42

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40B-081513 Lab Sample ID: 240-28011-14

Matrix: Water Lab File ID: UXR7035.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:58

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 21:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.37	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	0.31	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40B-081513 Lab Sample ID: 240-28011-14

Matrix: Water Lab File ID: UXR7035.D

Analysis Method: 8260B Date Collected: 08/15/2013 11:58

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 21:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	87		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40C-081513 | Lab Sample ID: 240-28011-15

Matrix: Water | Lab File ID: UXR7036.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 22:04

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | 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	0.21	J	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	0.49	J	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	0.51	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40C-081513 Lab Sample ID: 240-28011-15

Matrix: Water Lab File ID: UXR7036.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:02

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 22:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98060 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	0.26	J	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	0.94	J	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	0.48	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	1.9		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	0.22	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40C-081513 | Lab Sample ID: 240-28011-15

Matrix: Water | Lab File ID: UXR7036.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 22:04

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98060 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.4	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	87		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40D-081513 | Lab Sample ID: 240-28011-16

Matrix: Water | Lab File ID: UXR7049.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:06

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 03:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.22	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40D-081513 Lab Sample ID: 240-28011-16

Matrix: Water Lab File ID: UXR7049.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 03:37

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.26	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	0.29	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	0.44	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW40D-081513 | Lab Sample ID: 240-28011-16

Matrix: Water | Lab File ID: UXR7049.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:06

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 03:37

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41A-081513 | Lab Sample ID: 240-28011-17

Matrix: Water | Lab File ID: UXR7050.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 03:59

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.: 98083 | 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	0.16	J	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	0.38	J	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	0.42	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41A-081513 Lab Sample ID: 240-28011-17

Matrix: Water Lab File ID: UXR7050.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:09

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 03:59

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.: 98083 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	1.8		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	0.20	J	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	0.70	J	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	0.35	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	1.3		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	3.2		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	1.1		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41A-081513 Lab Sample ID: 240-28011-17

Matrix: Water Lab File ID: UXR7050.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:09

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 03:59

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.: 98083 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.1	J	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)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	87		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41B-081513 | Lab Sample ID: 240-28011-18

Matrix: Water | Lab File ID: UXR7051.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:15

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 04:21

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.: 98083 | 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	0.18	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41B-081513 Lab Sample ID: 240-28011-18

Matrix: Water Lab File ID: UXR7051.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 04:21

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.: 98083 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	0.47	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	0.29	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	0.78	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	0.30	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41B-081513 Lab Sample ID: 240-28011-18

Matrix: Water Lab File ID: UXR7051.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 04:21

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.: 98083 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41C-081513 | Lab Sample ID: 240-28011-19

Matrix: Water | Lab File ID: UXR7052.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:19

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 04:44

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.: 98083 | 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	0.22	J	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	0.51	J	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	0.42	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41C-081513 Lab Sample ID: 240-28011-19

Matrix: Water Lab File ID: UXR7052.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:19

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 04:44

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.: 98083 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	0.22	J	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	0.80	J	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	0.42	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	1.6		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	0.61	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41C-081513 | Lab Sample ID: 240-28011-19

Matrix: Water | Lab File ID: UXR7052.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:19

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 04:44

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.: 98083 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.2	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41D-081513 Lab Sample ID: 240-28011-20

Matrix: Water Lab File ID: UXR7053.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:28

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 05:06

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.: 98083 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41D-081513 Lab Sample ID: 240-28011-20

Matrix: Water Lab File ID: UXR7053.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:28

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 05:06

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.: 98083 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	0.39	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	0.75	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW41D-081513 | Lab Sample ID: 240-28011-20

Matrix: Water | Lab File ID: UXR7053.D

Analysis Method: 8260B | Date Collected: 08/15/2013 10:28

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 05:06

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.: 98083 | 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)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42A-081513 | Lab Sample ID: 240-28011-21

Matrix: Water | Lab File ID: UXR7054.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:09

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 05:28

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.29	J	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	2.7	J	5.0	1.1
71-43-2	Benzene	0.42	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42A-081513 Lab Sample ID: 240-28011-21

Matrix: Water Lab File ID: UXR7054.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:09

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 05:28

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	1.5		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	0.55	J	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	1.2		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	0.44	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	2.6		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42A-081513 Lab Sample ID: 240-28011-21

Matrix: Water Lab File ID: UXR7054.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:09

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 05:28

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.84	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	87		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42B-081513 Lab Sample ID: 240-28011-22

Matrix: Water Lab File ID: UXR7055.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:13

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 05:50

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.13	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42B-081513 | Lab Sample ID: 240-28011-22

Matrix: Water | Lab File ID: UXR7055.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:13

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 05:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.45	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	0.31	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42B-081513 | Lab Sample ID: 240-28011-22

Matrix: Water | Lab File ID: UXR7055.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:13

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 05:50

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42C-081513 Lab Sample ID: 240-28011-23

Matrix: Water Lab File ID: UXR7056.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:17

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 06:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.15	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42C-081513 Lab Sample ID: 240-28011-23

Matrix: Water Lab File ID: UXR7056.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:17

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 06:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.41	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	0.57	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	0.29	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42C-081513 | Lab Sample ID: 240-28011-23

Matrix: Water | Lab File ID: UXR7056.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:17

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 06:13

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42D-081513 | Lab Sample ID: 240-28011-24

Matrix: Water | Lab File ID: UXR7057.D

Analysis Method: 8260B | Date Collected: 08/15/2013 12:22

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 06:35

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.14	J	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	0.33	J	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	2.3	J	5.0	1.1
71-43-2	Benzene	0.46	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42D-081513 Lab Sample ID: 240-28011-24

Matrix: Water Lab File ID: UXR7057.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:22

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 06:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.20	J	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	0.72	J	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	0.38	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	1.6		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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW42D-081513 Lab Sample ID: 240-28011-24

Matrix: Water Lab File ID: UXR7057.D

Analysis Method: 8260B Date Collected: 08/15/2013 12:22

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 06:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.1	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43A-081513 | Lab Sample ID: 240-28011-25

Matrix: Water | Lab File ID: UXR7058.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:47

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 06:57

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.21	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43A-081513 Lab Sample ID: 240-28011-25

Matrix: Water Lab File ID: UXR7058.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:47

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 06:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	3.4		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	0.28	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	4.9		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	1.1		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43A-081513 Lab Sample ID: 240-28011-25

Matrix: Water Lab File ID: UXR7058.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:47

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 06:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	89		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43B-081513 | Lab Sample ID: 240-28011-26

Matrix: Water | Lab File ID: UXR7059.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 07:19

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.: 98083 | 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	0.19	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43B-081513 Lab Sample ID: 240-28011-26

Matrix: Water Lab File ID: UXR7059.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 07:19

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.: 98083 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	0.54	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	0.30	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	0.93	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	0.38	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43B-081513 | Lab Sample ID: 240-28011-26

Matrix: Water | Lab File ID: UXR7059.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 07:19

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.: 98083 | 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43C-081513 Lab Sample ID: 240-28011-27

Matrix: Water Lab File ID: UXR7060.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:57

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 07:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.30	J	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	0.43	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43C-081513 | Lab Sample ID: 240-28011-27

Matrix: Water | Lab File ID: UXR7060.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:57

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 07:42

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.39	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	0.17	J	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	0.67	J	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	0.32	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	1.3		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	0.29	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43C-081513 Lab Sample ID: 240-28011-27

Matrix: Water Lab File ID: UXR7060.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:57

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 07:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.99	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	88		75-121
2037-26-5	Toluene-d8 (Surr)	83		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43D-081513 Lab Sample ID: 240-28011-28

Matrix: Water Lab File ID: UXR7061.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:01

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.25	J	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	0.64	J	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	0.62	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43D-081513 Lab Sample ID: 240-28011-28

Matrix: Water Lab File ID: UXR7061.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:01

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.31	J	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	1.1	J	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	0.56	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	2.2		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	0.75	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	0.30	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43D-081513 Lab Sample ID: 240-28011-28

Matrix: Water Lab File ID: UXR7061.D

Analysis Method: 8260B Date Collected: 08/15/2013 10:01

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.7	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44A-081513 | Lab Sample ID: 240-28011-29

Matrix: Water | Lab File ID: UXR7062.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 08:26

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.15	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44A-081513 Lab Sample ID: 240-28011-29

Matrix: Water Lab File ID: UXR7062.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	1.8		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	0.51		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44A-081513 Lab Sample ID: 240-28011-29

Matrix: Water Lab File ID: UXR7062.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44B-081513 Lab Sample ID: 240-28011-30

Matrix: Water Lab File ID: UXR7063.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:48

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.: 98083 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	0.13	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44B-081513 Lab Sample ID: 240-28011-30

Matrix: Water Lab File ID: UXR7063.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 08:48

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.: 98083 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	0.75	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	0.46	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44B-081513 | Lab Sample ID: 240-28011-30

Matrix: Water | Lab File ID: UXR7063.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 08:48

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.: 98083 | 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44C-081513 Lab Sample ID: 240-28011-31

Matrix: Water Lab File ID: UXR7064.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 09:11

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.: 98083 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	0.19	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44C-081513 Lab Sample ID: 240-28011-31

Matrix: Water Lab File ID: UXR7064.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 09:11

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.: 98083 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	0.77	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	0.28	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	1.5		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	0.43	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44C-081513 Lab Sample ID: 240-28011-31

Matrix: Water Lab File ID: UXR7064.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 09:11

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.: 98083 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44D-081513 Lab Sample ID: 240-28011-32

Matrix: Water Lab File ID: UXR7065.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 09:33

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.: 98083 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	0.15	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44D-081513 Lab Sample ID: 240-28011-32

Matrix: Water Lab File ID: UXR7065.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 09:33

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.: 98083 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	0.50	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	0.33	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW44D-081513 | Lab Sample ID: 240-28011-32

Matrix: Water | Lab File ID: UXR7065.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:36

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 09:33

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.: 98083 | 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)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45A-081513 | Lab Sample ID: 240-28011-33

Matrix: Water | Lab File ID: UXR7066.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:51

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 09:55

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	0.26	J	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	0.57	J	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	0.66	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45A-081513 Lab Sample ID: 240-28011-33

Matrix: Water Lab File ID: UXR7066.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 09:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	1.2		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	0.33	J	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	1.1	J	2.0	0.24
91-20-3	Naphthalene	0.30	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	0.59	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	2.5		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	2.5		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	0.61		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45A-081513 | Lab Sample ID: 240-28011-33

Matrix: Water | Lab File ID: UXR7066.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:51

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 09:55

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	1.7	J	2.0	0.14

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45B-081513 Lab Sample ID: 240-28011-34

Matrix: Water Lab File ID: UXR7067.D

Analysis Method: 8260B Date Collected: 08/15/2013 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 10:17

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.: 98083 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	0.16	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45B-081513 | Lab Sample ID: 240-28011-34

Matrix: Water | Lab File ID: UXR7067.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:58

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 10:17

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.: 98083 | 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	0.66	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	0.34	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45B-081513 | Lab Sample ID: 240-28011-34

Matrix: Water | Lab File ID: UXR7067.D

Analysis Method: 8260B | Date Collected: 08/15/2013 08:58

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 10:17

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.: 98083 | 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)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
1868-53-7	Dibromofluoromethane (Surr)	92		75-121
2037-26-5	Toluene-d8 (Surr)	83		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45C-081513 | Lab Sample ID: 240-28011-35

Matrix: Water | Lab File ID: UXR7068.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:03

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 10:39

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45C-081513 Lab Sample ID: 240-28011-35

Matrix: Water Lab File ID: UXR7068.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 10:39

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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	0.84	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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45C-081513 Lab Sample ID: 240-28011-35

Matrix: Water Lab File ID: UXR7068.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 10:39

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98083 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	81		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45D-081513 Lab Sample ID: 240-28011-36

Matrix: Water Lab File ID: UXR7089.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 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.: 98201 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.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45D-081513 Lab Sample ID: 240-28011-36

Matrix: Water Lab File ID: UXR7089.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 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.: 98201 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	0.71	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW45D-081513 Lab Sample ID: 240-28011-36

Matrix: Water Lab File ID: UXR7089.D

Analysis Method: 8260B Date Collected: 08/15/2013 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 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.: 98201 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	83		66-117
1868-53-7	Dibromofluoromethane (Surr)	89		75-121
2037-26-5	Toluene-d8 (Surr)	85		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: TB-081513 | Lab Sample ID: 240-28011-41

Matrix: Water | Lab File ID: UXR7094.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:23

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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	1.7	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.: 240-28011-1

SDG No.:

Client Sample ID: TB-081513 Lab Sample ID: 240-28011-41

Matrix: Water Lab File ID: UXR7094.D

Analysis Method: 8260B Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 22:23

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 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.: 240-28011-1

SDG No.:

Client Sample ID: TB-081513 | Lab Sample ID: 240-28011-41

Matrix: Water | Lab File ID: UXR7094.D

Analysis Method: 8260B | Date Collected: 08/15/2013 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 22:23

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	82		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	84		74-115

APPENDIX C

SUPPORT DOCUMENTATION

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HARD	MG/L	MSA-SW41A-081513	240-28011-17	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW41B-081513	240-28011-18	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW38D-081513	240-28011-8	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
OV	UG/L	MSA-SW44C-081513	240-28011-31	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW43C-081513	240-28011-27	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW44A-081513	240-28011-29	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW41C-081513	240-28011-19	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW41D-081513	240-28011-20	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW42A-081513	240-28011-21	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW42B-081513	240-28011-22	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW42C-081513	240-28011-23	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW42D-081513	240-28011-24	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW41A-081513	240-28011-17	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW43B-081513	240-28011-26	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW40D-081513	240-28011-16	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW43D-081513	240-28011-28	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW44B-081513	240-28011-30	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW44D-081513	240-28011-32	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MSA-SW45A-081513	240-28011-33	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW45B-081513	240-28011-34	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW45C-081513	240-28011-35	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW45D-081513	240-28011-36	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	TB-081513	240-28011-41	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW43A-081513	240-28011-25	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW38C-081513	240-28011-7	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	EL-SW01B-081513	240-28011-38	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	EL-SW01C-081513	240-28011-39	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	EL-SW01D-081513	240-28011-40	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW37A-081513	240-28011-1	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW37B-081513	240-28011-2	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW37C-081513	240-28011-3	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW37D-081513	240-28011-4	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW41B-081513	240-28011-18	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW38B-081513	240-28011-6	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	EL-SW01A-081513	240-28011-37	NM	08/15/2013	08/20/2013	08/20/2013	5	0	5
OV	UG/L	MSA-SW38D-081513	240-28011-8	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MSA-SW39A-081513	240-28011-9	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW39B-081513	240-28011-10	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW39C-081513	240-28011-11	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW39D-081513	240-28011-12	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW40A-081513	240-28011-13	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW40B-081513	240-28011-14	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW40C-081513	240-28011-15	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4
OV	UG/L	MSA-SW38A-081513	240-28011-5	NM	08/15/2013	08/19/2013	08/19/2013	4	0	4

2.8/3.2

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.077

240-28011 Chain of Custody

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			112IC04793.08
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW37A-081513	8/15/2013	1227	SW	Water	4	x	x	x	x	
MSA-SW37B-081513	8/15/2013	1232	SW	Water	4	x	x	x	x	
MSA-SW37C-081513	8/15/2013	1237	SW	Water	4	x	x	x	x	
MSA-SW37D-081513	8/15/2013	1243	SW	Water	4	x	x	x	x	
MSA-SW38A-081513	8/15/2013	1126	SW	Water	4	x	x	x	x	
MSA-SW38B-081513	8/15/2013	1131	SW	Water	4	x	x	x	x	
MSA-SW38C-081513	8/15/2013	1135	SW	Water	4	x	x	x	x	
MSA-SW38D-081513	8/15/2013	1140	SW	Water	4	x	x	x	x	
MSA-SW39A-081513	8/15/2013	0826	SW	Water	4	x	x	x	x	
MSA-SW39B-081513	8/15/2013	0833	SW	Water	4	x	x	x	x	
MSA-SW39C-081513	8/15/2013	0838	SW	Water	4	x	x	x	x	
MSA-SW39D-081513	8/15/2013	0844	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]	Tetratech	8/15/13 1430	[signature]	TestAmerica	8/15/13 / 1500
[signature]	TestAmerica	8/15/13/1640	[signature]	TA	8-16-13 930

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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera 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. 117-100479308
Germantown, MD 20874	Calendar (C) or Work Days (W) ____			
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW40A-081513	8/15/2013	1146	SW	Water	4	x	x	x	x	
MSA-SW40B-081513	8/15/2013	1158	SW	Water	4	x	x	x	x	
MSA-SW40C-081513	8/15/2013	1202	SW	Water	4	x	x	x	x	
MSA-SW40D-081513	8/15/2013	1206	SW	Water	4	x	x	x	x	
MSA-SW41A-081513	8/15/2013	1009	SW	Water	4	x	x	x	x	
MSA-SW41B-081513	8/15/2013	1015	SW	Water	4	x	x	x	x	
MSA-SW41C-081513	8/15/2013	1019	SW	Water	4	x	x	x	x	
MSA-SW41D-081513	8/15/2013	1028	SW	Water	4	x	x	x	x	
MSA-SW42A-081513	8/15/2013	1209	SW	Water	4	x	x	x	x	
MSA-SW42B-081513	8/15/2013	1213	SW	Water	4	x	x	x	x	
MSA-SW42C-081513	8/15/2013	1217	SW	Water	4	x	x	x	x	
MSA-SW42D-081513	8/15/2013	1222	SW	Water	4	x	x	x	x	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other ____

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tera Tech	8/15/13 1430	[signature]	TestAmerica	8/15/13 1500
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 8/15/13 1640	Received by: [signature]	Company: TA	Date/Time: 8-16-13 930
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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera 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. 112-100743.08
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW43A-081513	8/15/2013	0947	SW	Water	4	x	x	x	x	
MSA-SW43B-081513	8/15/2013	0953	SW	Water	4	x	x	x	x	
MSA-SW43C-081513	8/15/2013	0957	SW	Water	4	x	x	x	x	
MSA-SW43D-081513	8/15/2013	1001	SW	Water	4	x	x	x	x	
MSA-SW44A-081513	8/15/2013	0920	SW	Water	4	x	x	x	x	
MSA-SW44B-081513	8/15/2013	0925	SW	Water	4	x	x	x	x	
MSA-SW44C-081513	8/15/2013	0929	SW	Water	4	x	x	x	x	
MSA-SW44D-081513	8/15/2013	0936	SW	Water	4	x	x	x	x	
MSA-SW45A-081513	8/15/2013	0851	SW	Water	4	x	x	x	x	
MSA-SW45B-081513	8/15/2013	0858	SW	Water	4	x	x	x	x	
MSA-SW45C-081513	8/15/2013	0907	SW	Water	4	x	x	x	x	
MSA-SW45D-081513	8/15/2013	0907	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**

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Tera Tech	8/15/13 1430		TestAmerica	8/15/13 1500
Relinquished by:	Company: TestAmerica	Date/Time: 8/15/13/1640	Received by:	Company: TA	Date/Time: 8-16-13 930
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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	9 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			112IC04793.08
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
EL-SW01A-081513	8/15/2013	0800	SW	AQ	3		x	
EL-SW01B-081513	8/15/2013	0807	SW	AQ	3		x	
EL-SW01C-081513	8/15/2013	0814	SW	AQ	3		x	
EL-SW01D-081513	8/15/2013	0817	SW	AQ	3		x	
TB-081513	–	–	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:
[signature]	Tetra Tech	8/15/13 1430	[signature]	8/15/13/1500	TestAmerica
[signature]	TestAmerica	8/15/13/1640	[signature]	TA	8-16-13 930

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative Login # : 28011
Canton Facility

Client Tetratech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8.16.13 Opened on 8.16.13

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 −1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☑ See Multiple Cooler Form
IR GUN# 5	(CF +1 °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 _____ 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# HC376062
11. Were VOAs on the COC? Yes No
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: [signature]

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): _____

Ref: SOP NC-SC-0005, Sample Receiving
Cans\T10\public\QAQC\SOPS\Work Instructions\WI-NC-099-061413, Rev 1 Cooler Receipt Form.doc rls

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : 28011
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CANTON	8	2.8	2.8	ICE
client	1	3.2	3.2	1

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MSA-SW37A-081513	240-28011-D-1	Plastic 500ml - with Nitric Acid	<2		
MSA-SW37B-081513	240-28011-D-2	Plastic 500ml - with Nitric Acid	<2		
MSA-SW37C-081513	240-28011-D-3	Plastic 500ml - with Nitric Acid	<2		
MSA-SW37D-081513	240-28011-D-4	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38A-081513	240-28011-D-5	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38B-081513	240-28011-D-6	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38C-081513	240-28011-D-7	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38D-081513	240-28011-D-8	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39A-081513	240-28011-D-9	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39B-081513	240-28011-D-10	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39C-081513	240-28011-D-11	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39D-081513	240-28011-D-12	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40A-081513	240-28011-D-13	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40B-081513	240-28011-D-14	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40C-081513	240-28011-D-15	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40D-081513	240-28011-D-16	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41A-081513	240-28011-D-17	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41B-081513	240-28011-D-18	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41C-081513	240-28011-D-19	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41D-081513	240-28011-D-20	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42A-081513	240-28011-D-21	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42B-081513	240-28011-D-22	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42C-081513	240-28011-D-23	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42D-081513	240-28011-D-24	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43A-081513	240-28011-D-25	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43B-081513	240-28011-D-26	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43C-081513	240-28011-D-27	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43D-081513	240-28011-D-28	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44A-081513	240-28011-D-29	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44B-081513	240-28011-D-30	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44C-081513	240-28011-D-31	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44D-081513	240-28011-D-32	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45A-081513	240-28011-D-33	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45B-081513	240-28011-D-34	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45C-081513	240-28011-D-35	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45D-081513	240-28011-D-36	Plastic 500ml - with Nitric Acid	<2		

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Login Number: 28011
List Number: 1
Creator: McFadden, John

List Source: TestAmerica Canton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA Surface Water Sampling

Report Number: 240-28011-1

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 08/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 2.8 and 3.2 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-081513 (240-28011-1), MSA-SW37B-081513 (240-28011-2), MSA-SW37C-081513 (240-28011-3), MSA-SW37D-081513 (240-28011-4), MSA-SW38A-081513 (240-28011-5), MSA-SW38B-081513 (240-28011-6), MSA-SW38C-081513 (240-28011-7), MSA-SW38D-081513 (240-28011-8), MSA-SW39A-081513 (240-28011-9), MSA-SW39B-081513 (240-28011-10), MSA-SW39C-081513 (240-28011-11), MSA-SW39D-081513 (240-28011-12), MSA-SW40A-081513 (240-28011-13), MSA-SW40B-081513 (240-28011-14), MSA-SW40C-081513 (240-28011-15), MSA-SW40D-081513 (240-28011-16), MSA-SW41A-081513 (240-28011-17), MSA-SW41B-081513 (240-28011-18), MSA-SW41C-081513 (240-28011-19), MSA-SW41D-081513 (240-28011-20), MSA-SW42A-081513 (240-28011-21), MSA-SW42B-081513 (240-28011-22), MSA-SW42C-081513 (240-28011-23), MSA-SW42D-081513 (240-28011-24), MSA-SW43A-081513 (240-28011-25), MSA-SW43B-081513 (240-28011-26), MSA-SW43C-081513 (240-28011-27), MSA-SW43D-081513 (240-28011-28), MSA-SW44A-081513 (240-28011-29), MSA-SW44B-081513 (240-28011-30), MSA-SW44C-081513 (240-28011-31), MSA-SW44D-081513 (240-28011-32), MSA-SW45A-081513 (240-28011-33), MSA-SW45B-081513 (240-28011-34), MSA-SW45C-081513 (240-28011-35), MSA-SW45D-081513 (240-28011-36), EL-SW01A-081513 (240-28011-37), EL-SW01B-081513 (240-28011-38), EL-SW01C-081513 (240-28011-39), EL-SW01D-081513 (240-28011-40) and TB-081513 (240-28011-41) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/19/2013 and 08/20/2013.

1,2,3-Trichlorobenzene was detected in method blank MB 240-98083/6 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.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MSA-SW37A-081513 (240-28011-1), MSA-SW37B-081513 (240-28011-2), MSA-SW37C-081513 (240-28011-3), MSA-SW37D-081513 (240-28011-4), MSA-SW38A-081513 (240-28011-5), MSA-SW38B-081513 (240-28011-6), MSA-SW38C-081513 (240-28011-7), MSA-SW38D-081513 (240-28011-8), MSA-SW39A-081513 (240-28011-9), MSA-SW39B-081513 (240-28011-10), MSA-SW39C-081513 (240-28011-11), MSA-SW39D-081513 (240-28011-12), MSA-SW40A-081513 (240-28011-13), MSA-SW40B-081513 (240-28011-14), MSA-SW40C-081513 (240-28011-15), MSA-SW40D-081513 (240-28011-16), MSA-SW41A-081513 (240-28011-17), MSA-SW41B-081513 (240-28011-18), MSA-SW41C-081513 (240-28011-19), MSA-SW41D-081513 (240-28011-20), MSA-SW42A-081513 (240-28011-21), MSA-SW42B-081513 (240-28011-22),

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-28011-1	MSA-SW37A-081513	Water	08/15/2013 1227	08/16/2013 0930
240-28011-2	MSA-SW37B-081513	Water	08/15/2013 1232	08/16/2013 0930
240-28011-3	MSA-SW37C-081513	Water	08/15/2013 1237	08/16/2013 0930
240-28011-4	MSA-SW37D-081513	Water	08/15/2013 1243	08/16/2013 0930
240-28011-5	MSA-SW38A-081513	Water	08/15/2013 1126	08/16/2013 0930
240-28011-6	MSA-SW38B-081513	Water	08/15/2013 1131	08/16/2013 0930
240-28011-7	MSA-SW38C-081513	Water	08/15/2013 1135	08/16/2013 0930
240-28011-8	MSA-SW38D-081513	Water	08/15/2013 1140	08/16/2013 0930
240-28011-9	MSA-SW39A-081513	Water	08/15/2013 0826	08/16/2013 0930
240-28011-10	MSA-SW39B-081513	Water	08/15/2013 0833	08/16/2013 0930
240-28011-11	MSA-SW39C-081513	Water	08/15/2013 0838	08/16/2013 0930
240-28011-12	MSA-SW39D-081513	Water	08/15/2013 0844	08/16/2013 0930
240-28011-13	MSA-SW40A-081513	Water	08/15/2013 1146	08/16/2013 0930
240-28011-14	MSA-SW40B-081513	Water	08/15/2013 1158	08/16/2013 0930
240-28011-15	MSA-SW40C-081513	Water	08/15/2013 1202	08/16/2013 0930
240-28011-16	MSA-SW40D-081513	Water	08/15/2013 1206	08/16/2013 0930
240-28011-17	MSA-SW41A-081513	Water	08/15/2013 1009	08/16/2013 0930
240-28011-18	MSA-SW41B-081513	Water	08/15/2013 1015	08/16/2013 0930
240-28011-19	MSA-SW41C-081513	Water	08/15/2013 1019	08/16/2013 0930
240-28011-20	MSA-SW41D-081513	Water	08/15/2013 1028	08/16/2013 0930
240-28011-21	MSA-SW42A-081513	Water	08/15/2013 1209	08/16/2013 0930
240-28011-22	MSA-SW42B-081513	Water	08/15/2013 1213	08/16/2013 0930
240-28011-23	MSA-SW42C-081513	Water	08/15/2013 1217	08/16/2013 0930
240-28011-24	MSA-SW42D-081513	Water	08/15/2013 1222	08/16/2013 0930
240-28011-25	MSA-SW43A-081513	Water	08/15/2013 0947	08/16/2013 0930
240-28011-26	MSA-SW43B-081513	Water	08/15/2013 0953	08/16/2013 0930
240-28011-27	MSA-SW43C-081513	Water	08/15/2013 0957	08/16/2013 0930
240-28011-28	MSA-SW43D-081513	Water	08/15/2013 1001	08/16/2013 0930
240-28011-29	MSA-SW44A-081513	Water	08/15/2013 0920	08/16/2013 0930
240-28011-30	MSA-SW44B-081513	Water	08/15/2013 0925	08/16/2013 0930
240-28011-31	MSA-SW44C-081513	Water	08/15/2013 0929	08/16/2013 0930
240-28011-32	MSA-SW44D-081513	Water	08/15/2013 0936	08/16/2013 0930
240-28011-33	MSA-SW45A-081513	Water	08/15/2013 0851	08/16/2013 0930
240-28011-34	MSA-SW45B-081513	Water	08/15/2013 0858	08/16/2013 0930
240-28011-35	MSA-SW45C-081513	Water	08/15/2013 0903	08/16/2013 0930
240-28011-36	MSA-SW45D-081513	Water	08/15/2013 0907	08/16/2013 0930
240-28011-37	EL-SW01A-081513	Water	08/15/2013 0800	08/16/2013 0930
240-28011-38	EL-SW01B-081513	Water	08/15/2013 0807	08/16/2013 0930
240-28011-39	EL-SW01C-081513	Water	08/15/2013 0814	08/16/2013 0930
240-28011-40	EL-SW01D-081513	Water	08/15/2013 0817	08/16/2013 0930
240-28011-41	TB-081513	Water	08/15/2013 0000	08/16/2013 0930

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-28011-1

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.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits
Metals		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: BFB414.D BFB Injection Date: 08/17/2013

Instrument ID: A3UX17 BFB Injection Time: 15:32

Analysis Batch No.: 97903

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	42.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.2	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	89.6	
175	5.0 - 9.0 % of mass 174	6.2	(6.9)1
176	95.0 - 101.0 % of mass 174	89.6	(100.0)1
177	5.0 - 9.0 % of mass 176	5.4	(6.1)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-97903/2	UXR7004.D	08/17/2013	15:56
	STD8260 240-97903/3	UXR7005.D	08/17/2013	16:18
	STD8260 240-97903/4	UXR7006.D	08/17/2013	16:41
	STD8260 240-97903/5	UXR7007.D	08/17/2013	17:03
	STD8260 240-97903/6	UXR7008.D	08/17/2013	17:25
	STD8260 240-97903/7	UXR7009.D	08/17/2013	17:48
	STDA9 240-97903/8	UXR7010.D	08/17/2013	18:10
	STDA9 240-97903/9	UXR7011.D	08/17/2013	18:32
	STDA9 240-97903/10	UXR7012.D	08/17/2013	18:54
	STDA9 240-97903/11	UXR7013.D	08/17/2013	19:16
	STDA9 240-97903/12	UXR7014.D	08/17/2013	19:39
	STDA9 240-97903/13	UXR7015.D	08/17/2013	20:01
	ICV 240-97903/14	UXR7016.D	08/17/2013	20:23

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

Lab Name: TestAmerica Canton Job No.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-97903/7	UXR7009.D
Level 2	STD8260 240-97903/6	UXR7008.D
Level 3	STD8260 240-97903/5	UXR7007.D
Level 4	STD8260 240-97903/4	UXR7006.D
Level 5	STD8260 240-97903/3	UXR7005.D
Level 6	STD8260 240-97903/2	UXR7004.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	0.3204 0.2926	0.2676	0.2764	0.2861	0.2872	Ave		0.2884				6.2		15.0			
Chloromethane	0.4139 0.3439	0.3668	0.3596	0.3531	0.3711	Ave		0.3681			0.1000	6.6		15.0			
Vinyl chloride	0.3940 0.3125	0.3245	0.3155	0.3332	0.3243	Ave		0.3340				9.1		15.0			
Bromomethane	0.1734 0.0852	0.1389	0.1172	0.1098	0.1078	Qua	0.0082	0.1248	-0.001						0.9990		0.9900
Chloroethane	0.1149 0.0795	0.1143	0.1007	0.0850	0.1011	Ave		0.0993				15.0		15.0			
Trichlorofluoromethane	0.2573 0.2239	0.2306	0.2276	0.2301	0.2270	Ave		0.2327				5.3		15.0			
~~Acrolein~~	0.0416 0.0342	0.0317	0.0345	0.0350	0.0348	Ave		~~0.035~~3				9.4		15.0			
1,1-Dichloroethene	0.2818 0.2716	0.2599	0.2612	0.2809	0.2682	Ave		0.2706				3.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2259 0.2105	0.1993	0.2023	0.2185	0.2130	Ave		0.2116				4.7		15.0			
Acetone	0.1943 0.0801	0.1013	0.0910	0.0876	0.0830	Lin1	0.1117	0.0795							1.0000		0.9900
Iodomethane	0.3883 0.3571	0.3803	0.3822	0.3812	0.3768	Ave		0.3777				2.8		15.0			
Carbon disulfide	0.7719 0.7593	0.6773	0.7122	0.7680	0.7537	Ave		0.7404				5.1		15.0			
~~Acetonitrile~~	0.0466 0.0335	0.0340	0.0368	0.0346	0.0344	Ave		~~0.036~~6				14.0		15.0			
Methyl acetate	0.2649 0.2101	0.2094	0.2214	0.2237	0.2177	Ave		0.2245				9.2		15.0			
Methylene Chloride	1.0972 0.2798	0.4538	0.3555	0.3214	0.2971	Lin1	0.4062	0.2728							1.0000		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.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

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								
tert-Butyl alcohol	0.0240 0.0204	0.0208	0.0212	0.0221	0.0216	Ave		0.0217				5.9		15.0			
Acrylonitrile	0.1371 0.1043	0.1034	0.1113	0.1144	0.1096	Ave		0.1133				11.0		15.0			
Methyl tert-butyl ether	0.7668 0.7487	0.7032	0.7304	0.7764	0.7508	Ave		0.7461				3.5		15.0			
trans-1,2-Dichloroethene	0.3148 0.2849	0.2867	0.2853	0.2966	0.2863	Ave		0.2924				4.0		15.0			
Hexane	0.0992 0.0780	0.0708	0.0695	0.0827	0.0800	Ave		0.0800				13.0		15.0			
1,1-Dichloroethane	0.5339 0.4884	0.4788	0.4796	0.5057	0.4874	Ave		0.4956			0.1000	4.3		15.0			
Vinyl acetate	0.0353 0.0410	0.0341	0.0395	0.0436	0.0431	Ave		0.0394				10.0		15.0			
2,2-Dichloropropane	0.2891 0.2547	0.2421	0.2517	0.2761	0.2630	Ave		0.2628				6.6		15.0			
cis-1,2-Dichloroethene	0.3348 0.2979	0.2915	0.3010	0.3187	0.3034	Ave		0.3079				5.2		15.0			
2-Butanone	0.1550 0.1121	0.1165	0.1152	0.1221	0.1194	Ave		0.1234				13.0		15.0			
Bromochloromethane	0.1627 0.1407	0.1371	0.1393	0.1472	0.1412	Ave		0.1447				6.5		15.0			
Tetrahydrofuran	0.1433 0.0739	0.0937	0.0801	0.0838	0.0777	Lin1	0.0363	0.0747							0.9990		0.9900
Chloroform	0.4968 0.4344	0.4333	0.4317	0.4548	0.4433	Ave		0.4491				5.6		15.0			
1,1,1-Trichloroethane	0.3491 0.3450	0.3369	0.3423	0.3732	0.3542	Ave		0.3501				3.6		15.0			
Cyclohexane	0.6528 0.5796	0.5383	0.5348	0.6061	0.5879	Ave		0.5833				7.6		15.0			
1,1-Dichloropropene	0.3835 0.3611	0.3385	0.3509	0.3855	0.3654	Ave		0.3641				5.0		15.0			
Carbon tetrachloride	0.3117 0.3191	0.2879	0.2913	0.3292	0.3199	Ave		0.3098				5.4		15.0			
Benzene	1.4198 1.1202	1.1585	1.1063	1.1850	1.1333	Ave		1.1872				9.9		15.0			
1,2-Dichloroethane	0.3511 0.3344	0.3323	0.3346	0.3528	0.3411	Ave		0.3411				2.6		15.0			
Trichloroethene	0.3448 0.2857	0.2917	0.2853	0.3070	0.2909	Ave		0.3009				7.6		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.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

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								
Methylcyclohexane	0.5453 0.5080	0.4552	0.4671	0.5291	0.5232	Ave		0.5046				7.1		15.0			
1,2-Dichloropropane	0.2805 0.2809	0.2698	0.2732	0.2999	0.2828	Ave		0.2812				3.7		15.0			
~~1,4-Dioxane~~	0.0031 0.0025	0.0029	0.0029	0.0029	0.0027	Ave		~~0.0028~~				6.9		15.0			
Dibromomethane	0.1442 0.1421	0.1403	0.1425	0.1520	0.1431	Ave		0.1440				2.8		15.0			
Bromodichloromethane	0.3119 0.3254	0.2892	0.2930	0.3231	0.3176	Ave		0.3100				5.0		15.0			
2-Chloroethyl vinyl ether	0.1316 0.1591	0.1239	0.1453	0.1553	0.1616	Ave		0.1461				11.0		15.0			
cis-1,3-Dichloropropene	0.3392 0.4287	0.3324	0.3686	0.4103	0.4121	Ave		0.3819				11.0		15.0			
4-Methyl-2-pentanone	0.2607 0.2377	0.2157	0.2417	0.2472	0.2493	Ave		0.2420				6.2		15.0			
Toluene	1.6522 1.4698	1.4513	1.4774	1.5492	1.5164	Ave		1.5194				4.9		15.0			
trans-1,3-Dichloropropene	0.3213 0.4538	0.3447	0.3782	0.4331	0.4465	Ave		0.3963				14.0		15.0			
Ethyl methacrylate	0.4007 0.4327	0.3691	0.3814	0.4268	0.4329	Ave		0.4073				6.8		15.0			
1,1,2-Trichloroethane	0.3167 0.2763	0.2853	0.2849	0.2935	0.2866	Ave		0.2905				4.8		15.0			
Tetrachloroethene	0.3325 0.3049	0.3095	0.3044	0.3290	0.3164	Ave		0.3161				3.9		15.0			
1,3-Dichloropropane	0.5272 0.4996	0.4841	0.4918	0.5267	0.5162	Ave		0.5076				3.6		15.0			
2-Hexanone	0.1971 0.2006	0.1820	0.1978	0.2079	0.2150	Ave		0.2001				5.6		15.0			
Dibromochloromethane	0.2402 0.3001	0.2430	0.2552	0.2811	0.2927	Ave		0.2687				9.7		15.0			
1,2-Dibromoethane	0.2911 0.2813	0.2846	0.2815	0.2929	0.2953	Ave		0.2878				2.1		15.0			
Chlorobenzene	1.1274 0.9807	0.9718	0.9671	1.0149	1.0027	Ave		1.0107			0.3000	5.9		15.0			
1,1,1,2-Tetrachloroethane	0.3060 0.3269	0.2962	0.3098	0.3339	0.3317	Ave		0.3174				4.9		15.0			
Ethylbenzene	0.5443 0.5315	0.5042	0.5217	0.5506	0.5482	Ave		0.5334				3.4		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.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

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								
m-Xylene & p-Xylene	0.6588 0.6727	0.6095	0.6454	0.6967	0.6838	Ave		0.6612				4.7		15.0			
o-Xylene	0.5652 0.6364	0.5841	0.6074	0.6647	0.6500	Ave		0.6180				6.3		15.0			
Styrene	0.8997 1.0677	0.8939	0.9726	1.0763	1.0831	Ave		0.9989				8.9		15.0			
Bromoform	0.1401 0.1923	0.1362	0.1490	0.1704	0.1835	Ave		0.1619			0.1000	15.0		15.0			
Isopropylbenzene	1.5085 1.6272	1.4364	1.5259	1.6642	1.6725	Ave		1.5725				6.1		15.0			
1,1,2,2-Tetrachloroethane	0.6899 0.5937	0.6221	0.6118	0.6565	0.6264	Ave		0.6334			0.3000	5.4		15.0			
Bromobenzene	0.8428 0.7434	0.7732	0.7399	0.7988	0.7642	Ave		0.7771				5.0		15.0			
1,2,3-Trichloropropane	0.2256 0.1928	0.2102	0.2058	0.2230	0.2026	Ave		0.2100				6.0		15.0			
trans-1,4-Dichloro-2-butene	0.1193 0.1579	0.1115	0.1100	0.1265	0.1387	Ave		0.1273				14.0		15.0			
n-Propylbenzene	0.8083 0.8092	0.7417	0.7798	0.8729	0.8206	Ave		0.8054				5.4		15.0			
2-Chlorotoluene	0.7298 0.6717	0.6515	0.6649	0.7468	0.6980	Ave		0.6938				5.5		15.0			
1,3,5-Trimethylbenzene	2.1369 2.3790	2.1516	2.2670	2.4960	2.4224	Ave		2.3088				6.4		15.0			
4-Chlorotoluene	0.7933 0.7186	0.7058	0.7223	0.7864	0.7387	Ave		0.7442				5.0		15.0			
tert-Butylbenzene	2.0917 2.2012	2.0079	2.0434	2.2852	2.1947	Ave		2.1373				5.0		15.0			
1,2,4-Trimethylbenzene	2.1622 2.4480	2.1730	2.2959	2.5240	2.4090	Ave		2.3353				6.4		15.0			
sec-Butylbenzene	2.8644 2.9340	2.6593	2.7372	3.0508	2.9003	Ave		2.8577				4.9		15.0			
1,3-Dichlorobenzene	1.6000 1.4148	1.3939	1.3950	1.4783	1.4105	Ave		1.4487				5.5		15.0			
p-Isopropyltoluene	2.3644 2.5719	2.2377	2.3885	2.6865	2.5733	Ave		2.4704				6.8		15.0			
1,4-Dichlorobenzene	1.6117 1.4458	1.4717	1.4339	1.5395	1.4513	Ave		1.4923				4.7		15.0			
n-Butylbenzene	1.9979 2.1246	1.8316	1.8865	2.1547	2.0745	Ave		2.0116				6.5		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.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 15:56 Calibration End Date: 08/17/2013 17:48 Calibration ID: 16931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5271 1.3033	1.3237	1.3061	1.3852	1.3171	Ave		1.3604				6.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1057 0.0982	0.0874	0.0888	0.0978	0.1015	Ave		0.0966				7.4		15.0			
1,3,5-Trichlorobenzene	1.1940 0.9716	1.0178	1.0187	1.0770	1.0108	Ave		1.0483				7.5		15.0			
1,2,4-Trichlorobenzene	1.1068 0.7641	0.9118	0.8790	0.9473	0.8677	Ave		0.9128				12.0		15.0			
Hexachlorobutadiene	0.6127 0.3153	0.4584	0.4366	0.4435	0.3631	Qua	0.1528	0.4230	-0.003						0.9980		0.9900
Naphthalene	2.0370 1.3497	1.6368	1.6979	1.8755	1.7777	Ave		1.7291				13.0		15.0			
1,2,3-Trichlorobenzene	1.1380 0.5313	0.8347	0.7936	0.8280	0.7164	Qua	-0.050	0.9072	-0.009						1.0000		0.9900
Dibromofluoromethane (Surr)	0.2446 0.2246	0.2310	0.2246	0.2337	0.2289	Ave		0.2312				3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3381 0.2592	0.2726	0.2664	0.2732	0.2645	Ave		0.2790				11.0		15.0			
Toluene-d8 (Surr)	1.4464 1.2376	1.3008	1.2447	1.2828	1.2699	Ave		1.2971				5.9		15.0			
4-Bromofluorobenzene (Surr)	0.5369 0.4602	0.4610	0.4532	0.4686	0.4753	Ave		0.4759				6.5		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.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-97903/13	UXR7015.D
Level 2	STDA9 240-97903/12	UXR7014.D
Level 3	STDA9 240-97903/11	UXR7013.D
Level 4	STDA9 240-97903/10	UXR7012.D
Level 5	STDA9 240-97903/9	UXR7011.D
Level 6	STDA9 240-97903/8	UXR7010.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								
Dichlorofluoromethane	0.4058 0.3150	0.2923	0.3314	0.3073	0.3098	Ave		0.3269				12.0		15.0			
Ethyl ether	0.2556 0.2493	0.2351	0.2562	0.2555	0.2582	Ave		0.2516				3.4		15.0			
3-Chloro-1-propene	0.1295 0.1407	0.1107	0.1227	0.1277	0.1381	Ave		0.1282				8.5		15.0			
Diisopropyl ether	0.2598 0.2542	0.2248	0.2497	0.2520	0.2611	Ave		0.2503				5.3		15.0			
2-Chloro-1,3-butadiene	0.4633 0.4486	0.4063	0.4234	0.4362	0.4556	Ave		0.4389				4.9		15.0			
Ethyl-t-butyl ether (ETBE)	0.8518 0.8690	0.7673	0.8096	0.8401	0.8700	Ave		0.8346				4.8		15.0			
Ethyl acetate	0.2494 0.2478	0.2117	0.2363	0.2410	0.2507	Ave		0.2395				6.1		15.0			
Propionitrile	0.0428 0.0394	0.0395	0.0384	0.0398	0.0403	Ave		0.0400				3.7		15.0			
Methacrylonitrile	0.1716 0.1599	0.1460	0.1626	0.1550	0.1635	Ave		0.1598				5.4		15.0			
Isobutyl alcohol	0.0115 0.0099	0.0089	0.0093	0.0098	0.0102	Ave		0.0099				8.9		15.0			
Tert-amyl-methyl ether (TAME)	0.6806 0.7154	0.5918	0.6571	0.6769	0.7228	Ave		0.6741				7.0		15.0			
n-Heptane	0.0793 0.0787	0.0664	0.0707	0.0732	0.0794	Ave		0.0746				7.3		15.0			
n-Butanol	0.0100 0.0096	0.0086	0.0090	0.0096	0.0098	Ave		0.0094				5.5		15.0			
Methyl methacrylate	0.2118 0.2263	0.1740	0.2034	0.2126	0.2275	Ave		0.2093				9.4		15.0			
2-Nitropropane	0.0419 0.0509	0.0409	0.0407	0.0447	0.0503	Ave		0.0449				10.0		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.: 240-28011-1 Analy Batch No.: 97903

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/17/2013 18:10 Calibration End Date: 08/17/2013 20:01 Calibration ID: 16934

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								
Cyclohexanone	0.0934 0.1169	0.0892	0.1098	0.1147	0.1227	Ave		0.1078				13.0		15.0			
1,2,3-Trimethylbenzene	2.2268 2.4130	1.8784	2.1822	2.2922	2.4829	Ave		2.2459				9.5		15.0			
2-Methylnaphthalene	0.8375	1.0311	1.0420	1.0385	0.8614	Ave		0.9621				11.0		15.0			
n-Butyl acetate	0.1966 0.2372	0.1786	0.2194	0.2183	0.2332	Ave		0.2139				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: ICV 240-97903/14 Calibration Date: 08/17/2013 20:23

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7016.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	0.2884	0.1788		1.00	0.0100	-38.0	50.0
Chloromethane	Ave	0.3681	0.3054	0.1000	1.00	0.0100	-17.0	50.0
Vinyl chloride	Ave	0.3340	0.2779		1.00	0.0100	-16.8	20.0
Bromomethane	Qua		0.0984		1.00	0.0100	-16.2	50.0
Chloroethane	Ave	0.0993	0.0941		1.00	0.0100	-5.2	50.0
Trichlorofluoromethane	Ave	0.2327	0.2092		1.00	0.0100	-10.1	50.0
1,1-Dichloroethene	Ave	0.2706	0.2560		1.00	0.0100	-5.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2151		1.00	0.0100	1.7	50.0
Acetone	Lin1		0.0745		10.0	0.0200	-13.3	50.0
Iodomethane	Ave	0.3777	0.3783		1.00	0.0100	0.2	50.0
Carbon disulfide	Ave	0.7404	0.7176		1.00	0.0100	-3.1	50.0
Methyl acetate	Ave	0.2245	0.2175		10.0	0.0100	-3.1	50.0
Methylene Chloride	Lin1		0.3178		1.00	0.0100	1.6	50.0
tert-Butyl alcohol	Ave	0.0217	0.0196		50.0	0.200	-9.9	50.0
Methyl tert-butyl ether	Ave	0.7461	0.7094		1.00	0.0100	-4.9	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2736		1.00	0.0100	-6.4	50.0
Hexane	Ave	0.0800	0.0738		1.00	0.0100	-7.9	20.0
1,1-Dichloroethane	Ave	0.4956	0.4741	0.1000	1.00	0.0100	-4.3	50.0
Vinyl acetate	Ave	0.0394	0.0378		2.00	0.0100	-4.1	50.0
2,2-Dichloropropane	Ave	0.2628	0.2377		1.00	0.0100	-9.5	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.2900		1.00	0.0100	-5.8	50.0
2-Butanone	Ave	0.1234	0.1100		10.0	0.0200	-10.9	50.0
Bromochloromethane	Ave	0.1447	0.1357		1.00	0.0100	-6.3	50.0
Tetrahydrofuran	Lin1		0.0720		5.00	0.0100	-8.5	50.0
Chloroform	Ave	0.4491	0.4279		1.00	0.0100	-4.7	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3357		1.00	0.0100	-4.1	50.0
Cyclohexane	Ave	0.5833	0.5169		1.00	0.0100	-11.4	50.0
1,1-Dichloropropene	Ave	0.3641	0.3417		1.00	0.0100	-6.2	50.0
Carbon tetrachloride	Ave	0.3098	0.2982		1.00	0.0100	-3.8	50.0
Benzene	Ave	1.187	1.115		1.00	0.0100	-6.1	50.0
1,2-Dichloroethane	Ave	0.3411	0.3309		1.00	0.0100	-3.0	50.0
Trichloroethene	Ave	0.3009	0.2858		1.00	0.0100	-5.0	50.0
Methylcyclohexane	Ave	0.5046	0.4443		1.00	0.0100	-12.0	50.0
1,2-Dichloropropane	Ave	0.2812	0.2746		1.00	0.0100	-2.3	20.0
Dibromomethane	Ave	0.1440	0.1427		1.00	0.0100	-0.9	50.0
Bromodichloromethane	Ave	0.3100	0.2949		1.00	0.0100	-4.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1461	0.1388		10.0	0.0100	-5.0	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3585		1.00	0.0100	-6.1	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2260		10.0	0.0200	-6.6	50.0
Toluene	Ave	1.519	1.455		1.00	0.0100	-4.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: ICV 240-97903/14 Calibration Date: 08/17/2013 20:23

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7016.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
trans-1,3-Dichloropropene	Ave	0.3963	0.3741		1.00	0.0100	-5.6	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2822		1.00	0.0100	-2.9	50.0
Tetrachloroethene	Ave	0.3161	0.3037		1.00	0.0100	-3.9	50.0
1,3-Dichloropropane	Ave	0.5076	0.4956		1.00	0.0100	-2.4	50.0
2-Hexanone	Ave	0.2001	0.1905		10.0	0.0200	-4.8	50.0
Dibromochloromethane	Ave	0.2687	0.2567		1.00	0.0100	-4.5	50.0
1,2-Dibromoethane	Ave	0.2878	0.2786		1.00	0.0100	-3.2	50.0
Chlorobenzene	Ave	1.011	0.9713	0.3000	1.00	0.0100	-3.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3102		1.00	0.0100	-2.3	50.0
Ethylbenzene	Ave	0.5334	0.5211		1.00	0.0100	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6540		2.00	0.0200	-1.1	50.0
o-Xylene	Ave	0.6180	0.6259		1.00	0.0100	1.3	50.0
Styrene	Ave	0.999	1.033		1.00	0.0100	3.5	50.0
Bromoform	Ave	0.1619	0.1550	0.1000	1.00	0.0100	-4.3	50.0
Isopropylbenzene	Ave	1.572	1.546		1.00	0.0100	-1.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5894	0.3000	1.00	0.0100	-6.9	50.0
Bromobenzene	Ave	0.7771	0.7523		1.00	0.0100	-3.2	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1974		1.00	0.0100	-6.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1258		1.00	0.0200	-1.2	50.0
n-Propylbenzene	Ave	0.8054	0.8140		1.00	0.0100	1.1	50.0
2-Chlorotoluene	Ave	0.6938	0.6855		1.00	0.0100	-1.2	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.312		1.00	0.0100	0.1	50.0
4-Chlorotoluene	Ave	0.7442	0.7263		1.00	0.0100	-2.4	50.0
tert-Butylbenzene	Ave	2.137	2.095		1.00	0.0100	-2.0	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.330		1.00	0.0100	-0.2	50.0
sec-Butylbenzene	Ave	2.858	2.760		1.00	0.0100	-3.4	50.0
1,3-Dichlorobenzene	Ave	1.449	1.386		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Ave	2.470	2.536		1.00	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.492	1.412		1.00	0.0100	-5.4	50.0
n-Butylbenzene	Ave	2.012	1.936		1.00	0.0100	-3.8	50.0
1,2-Dichlorobenzene	Ave	1.360	1.286		1.00	0.0100	-5.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0819		2.00	0.0100	-15.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.7212		1.00	0.0100	-21.0	50.0
Hexachlorobutadiene	Qua		0.3195		1.00	0.0100	-24.3	50.0
Naphthalene	Ave	1.729	1.190		1.00	0.0100	-31.2	50.0
1,2,3-Trichlorobenzene	Qua		0.5244		1.00	0.0100	-37.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2109		0.00813	0.00891	-8.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2384		0.00761	0.00891	-14.6	50.0
Toluene-d8 (Surr)	Ave	1.297	1.203		0.00827	0.00891	-7.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4700		0.00880	0.00891	-1.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: ICV 240-97903/14 Calibration Date: 08/17/2013 20:23

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7016.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
Ethyl ether	Ave	0.2516	0.2483		2.00	0.0100	-1.3	50.0
Diisopropyl ether	Ave	0.2503	0.2484		10.0	0.0100	-0.7	50.0
Isobutyl alcohol	Ave	0.0099	0.0094		50.0	0.500	-5.4	50.0
Cyclohexanone	Ave	0.1078	0.0229		20.0	0.200	-78.7*	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.332		0.0104	0.0100	3.8	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: BFB415.D BFB Injection Date: 08/19/2013

Instrument ID: A3UX17 BFB Injection Time: 14:23

Analysis Batch No.: 98060

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.1	
75	30.0 - 60.0 % of mass 95	43.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	81.1	
175	5.0 - 9.0 % of mass 174	5.7	(7.1)1
176	95.0 - 101.0 % of mass 174	80.6	(99.4)1
177	5.0 - 9.0 % of mass 176	4.9	(6.1)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98060/2	UXR7017.D	08/19/2013	15:00
	CCV 240-98060/3	UXR7018.D	08/19/2013	15:22
	LCS 240-98060/4	UXR7019.D	08/19/2013	15:44
	MB 240-98060/6	UXR7021.D	08/19/2013	16:29
MSA-SW37A-081513 ✗ Nap	240-28011-1	UXR7022.D	08/19/2013	16:51
MSA-SW37B-081513	240-28011-2	UXR7023.D	08/19/2013	17:14
MSA-SW37C-081513	240-28011-3	UXR7024.D	08/19/2013	17:36
MSA-SW37D-081513	240-28011-4	UXR7025.D	08/19/2013	17:58
MSA-SW38A-081513	240-28011-5	UXR7026.D	08/19/2013	18:21
MSA-SW38B-081513	240-28011-6	UXR7027.D	08/19/2013	18:43
MSA-SW38C-081513	240-28011-7	UXR7028.D	08/19/2013	19:05
MSA-SW38D-081513	240-28011-8	UXR7029.D	08/19/2013	19:27
MSA-SW39A-081513	240-28011-9	UXR7030.D	08/19/2013	19:50
MSA-SW39B-081513	240-28011-10	UXR7031.D	08/19/2013	20:12
MSA-SW39C-081513	240-28011-11	UXR7032.D	08/19/2013	20:35
MSA-SW39D-081513	240-28011-12	UXR7033.D	08/19/2013	20:57
MSA-SW40A-081513	240-28011-13	UXR7034.D	08/19/2013	21:19
MSA-SW40B-081513	240-28011-14	UXR7035.D	08/19/2013	21:42
MSA-SW40C-081513	240-28011-15	UXR7036.D	08/19/2013	22:04
	240-27783-D-15 MS	UXR7042.D	08/20/2013	00:16
	240-27783-I-15 MSD	UXR7043.D	08/20/2013	00:38

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98060/2 Calibration Date: 08/19/2013 15:00

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7017.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	0.2884	0.2760		1.00	0.0100	-4.3	50.0
Chloromethane	Ave	0.3681	0.3607	0.1000	1.00	0.0100	-2.0	50.0
Vinyl chloride	Ave	0.3340	0.3242		1.00	0.0100	-2.9	20.0
Bromomethane	Qua		0.1078		1.00	0.0100	-7.5	50.0
Chloroethane	Ave	0.0993	0.0901		1.00	0.0100	-9.3	50.0
Trichlorofluoromethane	Ave	0.2327	0.2251		1.00	0.0100	-3.3	50.0
Acrolein	Ave	0.0353	0.0367		20.0	0.100	-13.0	50.0
1,1-Dichloroethene	Ave	0.2706	0.2675		1.00	0.0100	-1.1	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2135		1.00	0.0100	0.9	50.0
Acetone	Lin1		0.0841		10.0	0.0200	-1.1	50.0
Iodomethane	Ave	0.3777	0.3642		1.00	0.0100	-3.6	50.0
Carbon disulfide	Ave	0.7404	0.7490		1.00	0.0100	1.2	50.0
Acetonitrile	Ave	0.0366	0.0340		20.0	0.100	-7.2	50.0
Methyl acetate	Ave	0.2245	0.2149		10.0	0.0200	-4.3	50.0
Methylene Chloride	Lin1		0.3044		1.00	0.0100	-3.3	50.0
tert-Butyl alcohol	Ave	0.0217	0.0204		50.0	0.200	-6.0	50.0
Acrylonitrile	Ave	0.1133	0.1045		20.0	0.0200	-7.8	50.0
Methyl tert-butyl ether	Ave	0.7461	0.7454		1.00	0.0100	-0.0	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2905		1.00	0.0100	-0.7	50.0
Hexane	Ave	0.0800	0.0742		1.00	0.0100	-7.3	20.0
1,1-Dichloroethane	Ave	0.4956	0.4817	0.1000	1.00	0.0100	-2.8	50.0
Vinyl acetate	Ave	0.0394	0.0355		2.00	0.0100	-9.9	50.0
2,2-Dichloropropane	Ave	0.2628	0.2497		1.00	0.0100	-5.0	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3030		1.00	0.0100	-1.6	50.0
2-Butanone	Ave	0.1234	0.1148		10.0	0.0200	-6.9	50.0
Bromochloromethane	Ave	0.1447	0.1471		1.00	0.0100	1.6	50.0
Tetrahydrofuran	Lin1		0.0742		5.00	0.0100	-5.5	50.0
Chloroform	Ave	0.4491	0.4439		1.00	0.0100	-1.1	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3540		1.00	0.0100	1.1	50.0
Cyclohexane	Ave	0.5833	0.5617		1.00	0.0100	-3.7	50.0
1,1-Dichloropropene	Ave	0.3641	0.3630		1.00	0.0100	-0.3	50.0
Carbon tetrachloride	Ave	0.3098	0.3188		1.00	0.0100	2.9	50.0
Benzene	Ave	1.187	1.136		1.00	0.0100	-4.3	50.0
1,2-Dichloroethane	Ave	0.3411	0.3425		1.00	0.0100	0.4	50.0
Trichloroethene	Ave	0.3009	0.2973		1.00	0.0100	-1.2	50.0
Methylcyclohexane	Ave	0.5046	0.4901		1.00	0.0100	-2.9	50.0
1,2-Dichloropropane	Ave	0.2812	0.2751		1.00	0.0100	-2.2	20.0
1,4-Dioxane	Ave	0.0028	0.0026		50.0	0.500	-7.9	50.0
Dibromomethane	Ave	0.1440	0.1451		1.00	0.0100	0.8	50.0
Bromodichloromethane	Ave	0.3100	0.3100		1.00	0.0100	-0.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98060/2 Calibration Date: 08/19/2013 15:00

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7017.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
2-Chloroethyl vinyl ether	Ave	0.1461	0.1447		10.0	0.0200	-1.0	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3993		1.00	0.0100	4.6	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2309		10.0	0.0200	-4.6	50.0
Toluene	Ave	1.519	1.500		1.00	0.0100	-1.2	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.4118		1.00	0.0100	3.9	50.0
Ethyl methacrylate	Ave	0.4073	0.4041		1.00	0.0100	-0.8	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2810		1.00	0.0100	-3.3	50.0
Tetrachloroethene	Ave	0.3161	0.3163		1.00	0.0100	0.0	50.0
1,3-Dichloropropane	Ave	0.5076	0.4973		1.00	0.0100	-2.0	50.0
2-Hexanone	Ave	0.2001	0.1929		10.0	0.0200	-3.6	50.0
Dibromochloromethane	Ave	0.2687	0.2788		1.00	0.0100	3.8	50.0
1,2-Dibromoethane	Ave	0.2878	0.2851		1.00	0.0100	-0.9	50.0
Chlorobenzene	Ave	1.011	0.9788	0.3000	1.00	0.0100	-3.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3212		1.00	0.0100	1.2	50.0
Ethylbenzene	Ave	0.5334	0.5329		1.00	0.0100	-0.0	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6734		2.00	0.0200	1.9	50.0
o-Xylene	Ave	0.6180	0.6295		1.00	0.0100	1.9	50.0
Styrene	Ave	0.999	1.034		1.00	0.0100	3.5	50.0
Bromoform	Ave	0.1619	0.1724	0.1000	1.00	0.0100	6.5	50.0
Isopropylbenzene	Ave	1.572	1.608		1.00	0.0100	2.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.6143	0.3000	1.00	0.0100	-3.0	50.0
Bromobenzene	Ave	0.7771	0.7734		1.00	0.0100	-0.5	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.2016		1.00	0.0100	-4.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1467		1.00	0.0100	15.2	50.0
n-Propylbenzene	Ave	0.8054	0.8120		1.00	0.0100	0.8	50.0
2-Chlorotoluene	Ave	0.6938	0.7097		1.00	0.0100	2.3	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.370		1.00	0.0100	2.7	50.0
4-Chlorotoluene	Ave	0.7442	0.7470		1.00	0.0100	0.4	50.0
tert-Butylbenzene	Ave	2.137	2.144		1.00	0.0100	0.3	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.383		1.00	0.0100	2.0	50.0
sec-Butylbenzene	Ave	2.858	2.828		1.00	0.0100	-1.0	50.0
1,3-Dichlorobenzene	Ave	1.449	1.432		1.00	0.0100	-1.2	50.0
p-Isopropyltoluene	Ave	2.470	2.509		1.00	0.0100	1.6	50.0
1,4-Dichlorobenzene	Ave	1.492	1.489		1.00	0.0100	-0.2	50.0
n-Butylbenzene	Ave	2.012	1.987		1.00	0.0100	-1.2	50.0
1,2-Dichlorobenzene	Ave	1.360	1.333		1.00	0.0100	-2.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0897		2.00	0.0100	-7.1	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.9876		1.00	0.0100	-5.8	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.7703		1.00	0.0100	-15.6	50.0
Hexachlorobutadiene	Qua		0.3402		1.00	0.0100	-18.8	50.0
Naphthalene	Ave	1.729	1.278		1.00	0.0100	-26.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98060/2 Calibration Date: 08/19/2013 15:00

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7017.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
1,2,3-Trichlorobenzene	Qua		0.5609		1.00	0.0100	-33.0	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2149		0.00828	0.00891	-7.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2445		0.00781	0.00891	-12.4	50.0
Toluene-d8 (Surr)	Ave	1.297	1.186		0.00815	0.00891	-8.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4535		0.00849	0.00891	-4.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCV 240-98060/3 Calibration Date: 08/19/2013 15:22

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7018.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
Dichlorofluoromethane	Ave	0.3269	0.3200		2.00	0.0100	-2.1	50.0
Ethyl ether	Ave	0.2516	0.2570		2.00	0.0100	2.1	50.0
3-Chloro-1-propene	Ave	0.1282	0.1384		2.00	0.0100	7.9	50.0
Diisopropyl ether	Ave	0.2503	0.2604		10.0	0.0500	4.0	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4558		2.00	0.0100	3.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.8591		5.00	0.0100	2.9	50.0
Ethyl acetate	Ave	0.2395	0.2438		4.00	0.0200	1.8	50.0
Propionitrile	Ave	0.0400	0.0384		4.00	0.0200	-4.1	50.0
Methacrylonitrile	Ave	0.1598	0.1599		2.00	0.0100	0.0	50.0
Isobutyl alcohol	Ave	0.0099	0.0098		50.0	0.200	-1.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.6993		5.00	0.0100	3.7	50.0
n-Heptane	Ave	0.0746	0.0795		1.00	0.0100	6.6	50.0
n-Butanol	Ave	0.0094	0.0086		50.0	0.200	-9.0	50.0
Methyl methacrylate	Ave	0.2093	0.2093		2.00	0.0100	0.0	50.0
2-Nitropropane	Ave	0.0449	0.0452		2.00	0.0200	0.7	50.0
Cyclohexanone	Ave	0.1078	0.1077		20.0	0.100	-0.0	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.402		0.0107	0.0100	6.9	50.0
2-Methylnaphthalene	Ave	0.9621	0.1780		5.00	0.0200	-81.5*	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: BFB416.D BFB Injection Date: 08/20/2013

Instrument ID: A3UX17 BFB Injection Time: 01:02

Analysis Batch No.: 98083

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.8	
75	30.0 - 60.0 % of mass 95	43.4	
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	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	83.3	
175	5.0 - 9.0 % of mass 174	6.1	(7.3)1
176	95.0 - 101.0 % of mass 174	82.9	(99.6)1
177	5.0 - 9.0 % of mass 176	5.6	(6.7)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98083/2	UXR7044.D	08/20/2013	01:45
	CCV 240-98083/3	UXR7045.D	08/20/2013	02:08
	LCS 240-98083/4	UXR7046.D	08/20/2013	02:30
	MB 240-98083/6	UXR7048.D	08/20/2013	03:14
MSA-SW40D-081513	240-28011-16	UXR7049.D	08/20/2013	03:37
MSA-SW41A-081513	240-28011-17	UXR7050.D	08/20/2013	03:59
MSA-SW41B-081513	240-28011-18	UXR7051.D	08/20/2013	04:21
MSA-SW41C-081513	240-28011-19	UXR7052.D	08/20/2013	04:44
MSA-SW41D-081513	240-28011-20	UXR7053.D	08/20/2013	05:06
MSA-SW42A-081513	240-28011-21	UXR7054.D	08/20/2013	05:28
MSA-SW42B-081513	240-28011-22	UXR7055.D	08/20/2013	05:50
MSA-SW42C-081513	240-28011-23	UXR7056.D	08/20/2013	06:13
MSA-SW42D-081513	240-28011-24	UXR7057.D	08/20/2013	06:35
MSA-SW43A-081513	240-28011-25	UXR7058.D	08/20/2013	06:57
MSA-SW43B-081513	240-28011-26	UXR7059.D	08/20/2013	07:19
MSA-SW43C-081513	240-28011-27	UXR7060.D	08/20/2013	07:42
MSA-SW43D-081513	240-28011-28	UXR7061.D	08/20/2013	08:04
MSA-SW44A-081513	240-28011-29	UXR7062.D	08/20/2013	08:26
MSA-SW44B-081513	240-28011-30	UXR7063.D	08/20/2013	08:48
MSA-SW44C-081513	240-28011-31	UXR7064.D	08/20/2013	09:11
MSA-SW44D-081513	240-28011-32	UXR7065.D	08/20/2013	09:33
MSA-SW45A-081513 Dup	240-28011-33	UXR7066.D	08/20/2013	09:55
MSA-SW45B-081513	240-28011-34	UXR7067.D	08/20/2013	10:17
MSA-SW45C-081513	240-28011-35	UXR7068.D	08/20/2013	10:39
MSA-SW40D-081513 MS	240-28011-16 MS	UXR7069.D	08/20/2013	11:27
MSA-SW40D-081513 MSD	240-28011-16 MSD	UXR7070.D	08/20/2013	11:49

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98083/2 Calibration Date: 08/20/2013 01:45

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7044.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	0.2884	0.2523		1.00	0.0100	-12.5	50.0
Chloromethane	Ave	0.3681	0.3713	0.1000	1.00	0.0100	0.9	50.0
Vinyl chloride	Ave	0.3340	0.3358		1.00	0.0100	0.5	20.0
Bromomethane	Qua		0.1318		1.00	0.0100	15.6	50.0
Chloroethane	Ave	0.0993	0.1237		1.00	0.0100	24.6	50.0
Trichlorofluoromethane	Ave	0.2327	0.2377		1.00	0.0100	2.1	50.0
Acrolein	Ave	0.0353	0.0283		20.0	0.100	-19.8	50.0
1,1-Dichloroethene	Ave	0.2706	0.2670		1.00	0.0100	-1.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2059		1.00	0.0100	-2.7	50.0
Acetone	Lin1		0.0776		10.0	0.0200	-9.3	50.0
Iodomethane	Ave	0.3777	0.4458		1.00	0.0100	18.0	50.0
Carbon disulfide	Ave	0.7404	0.7347		1.00	0.0100	-0.8	50.0
Acetonitrile	Ave	0.0366	0.0342		20.0	0.100	-6.7	50.0
Methyl acetate	Ave	0.2245	0.2132		10.0	0.0200	-5.1	50.0
Methylene Chloride	Lin1		0.3335		1.00	0.0100	7.4	50.0
tert-Butyl alcohol	Ave	0.0217	0.0180		50.0	0.200	-16.9	50.0
Acrylonitrile	Ave	0.1133	0.1053		20.0	0.0200	-7.1	50.0
Methyl tert-butyl ether	Ave	0.7461	0.7350		1.00	0.0100	-1.5	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2971		1.00	0.0100	1.6	50.0
Hexane	Ave	0.0800	0.0701		1.00	0.0100	-12.4	20.0
1,1-Dichloroethane	Ave	0.4956	0.4955	0.1000	1.00	0.0100	-0.0	50.0
Vinyl acetate	Ave	0.0394	0.0265		2.00	0.0100	-32.8	50.0
2,2-Dichloropropane	Ave	0.2628	0.2357		1.00	0.0100	-10.3	50.0
2-Butanone	Ave	0.1234	0.1132		10.0	0.0200	-8.3	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3172		1.00	0.0100	3.0	50.0
Bromochloromethane	Ave	0.1447	0.1503		1.00	0.0100	3.8	50.0
Tetrahydrofuran	Lin1		0.0781		5.00	0.0100	-0.3	50.0
Chloroform	Ave	0.4491	0.4557		1.00	0.0100	1.5	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3446		1.00	0.0100	-1.6	50.0
Cyclohexane	Ave	0.5833	0.5064		1.00	0.0100	-13.2	50.0
1,1-Dichloropropene	Ave	0.3641	0.3579		1.00	0.0100	-1.7	50.0
Carbon tetrachloride	Ave	0.3098	0.2986		1.00	0.0100	-3.6	50.0
Benzene	Ave	1.187	1.168		1.00	0.0100	-1.6	50.0
1,2-Dichloroethane	Ave	0.3411	0.3531		1.00	0.0100	3.5	50.0
Trichloroethene	Ave	0.3009	0.2995		1.00	0.0100	-0.5	50.0
Methylcyclohexane	Ave	0.5046	0.4440		1.00	0.0100	-12.0	50.0
1,2-Dichloropropane	Ave	0.2812	0.2838		1.00	0.0100	0.9	20.0
1,4-Dioxane	Ave	0.0028	0.0027		50.0	0.500	-4.6	50.0
Dibromomethane	Ave	0.1440	0.1489		1.00	0.0100	3.3	50.0
Bromodichloromethane	Ave	0.3100	0.3033		1.00	0.0100	-2.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98083/2 Calibration Date: 08/20/2013 01:45

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7044.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
2-Chloroethyl vinyl ether	Ave	0.1461	0.1451		10.0	0.0200	-0.7	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3635		1.00	0.0100	-4.8	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2227		10.0	0.0200	-8.0	50.0
Toluene	Ave	1.519	1.470		1.00	0.0100	-3.2	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3661		1.00	0.0100	-7.6	50.0
Ethyl methacrylate	Ave	0.4073	0.3820		1.00	0.0100	-6.2	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2927		1.00	0.0100	0.7	50.0
Tetrachloroethene	Ave	0.3161	0.3063		1.00	0.0100	-3.1	50.0
1,3-Dichloropropane	Ave	0.5076	0.5044		1.00	0.0100	-0.6	50.0
2-Hexanone	Ave	0.2001	0.1870		10.0	0.0200	-6.6	50.0
Dibromochloromethane	Ave	0.2687	0.2606		1.00	0.0100	-3.0	50.0
1,2-Dibromoethane	Ave	0.2878	0.2890		1.00	0.0100	0.4	50.0
Chlorobenzene	Ave	1.011	0.9799	0.3000	1.00	0.0100	-3.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3068		1.00	0.0100	-3.3	50.0
Ethylbenzene	Ave	0.5334	0.5055		1.00	0.0100	-5.2	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6491		2.00	0.0200	-1.8	50.0
o-Xylene	Ave	0.6180	0.6167		1.00	0.0100	-0.2	50.0
Styrene	Ave	0.999	0.997		1.00	0.0100	-0.1	50.0
Bromoform	Ave	0.1619	0.1481	0.1000	1.00	0.0100	-8.6	50.0
Isopropylbenzene	Ave	1.572	1.478		1.00	0.0100	-6.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5870	0.3000	1.00	0.0100	-7.3	50.0
Bromobenzene	Ave	0.7771	0.7507		1.00	0.0100	-3.4	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1996		1.00	0.0100	-5.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.0811		1.00	0.0100	-36.3	50.0
n-Propylbenzene	Ave	0.8054	0.7539		1.00	0.0100	-6.4	50.0
2-Chlorotoluene	Ave	0.6938	0.6721		1.00	0.0100	-3.1	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.192		1.00	0.0100	-5.0	50.0
4-Chlorotoluene	Ave	0.7442	0.7031		1.00	0.0100	-5.5	50.0
tert-Butylbenzene	Ave	2.137	1.989		1.00	0.0100	-7.0	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.250		1.00	0.0100	-3.7	50.0
sec-Butylbenzene	Ave	2.858	2.612		1.00	0.0100	-8.6	50.0
1,3-Dichlorobenzene	Ave	1.449	1.359		1.00	0.0100	-6.2	50.0
p-Isopropyltoluene	Ave	2.470	2.312		1.00	0.0100	-6.4	50.0
1,4-Dichlorobenzene	Ave	1.492	1.419		1.00	0.0100	-4.9	50.0
n-Butylbenzene	Ave	2.012	1.744		1.00	0.0100	-13.3	50.0
1,2-Dichlorobenzene	Ave	1.360	1.280		1.00	0.0100	-5.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0791		2.00	0.0100	-18.1	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.8937		1.00	0.0100	-14.8	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6724		1.00	0.0100	-26.3	50.0
Hexachlorobutadiene	Qua		0.3089		1.00	0.0100	-27.0	50.0
Naphthalene	Ave	1.729	1.098		1.00	0.0100	-36.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98083/2 Calibration Date: 08/20/2013 01:45

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7044.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
1,2,3-Trichlorobenzene	Qua		0.4911		1.00	0.0100	-41.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2207		0.00851	0.00891	-4.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2439		0.00779	0.00891	-12.6	50.0
Toluene-d8 (Surr)	Ave	1.297	1.218		0.00836	0.00891	-6.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4575		0.00857	0.00891	-3.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCV 240-98083/3 Calibration Date: 08/20/2013 02:08

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7045.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
Dichlorofluoromethane	Ave	0.3269	0.3293		2.00	0.0100	0.7	50.0
Ethyl ether	Ave	0.2516	0.2356		2.00	0.0100	-6.4	50.0
3-Chloro-1-propene	Ave	0.1282	0.1189		2.00	0.0100	-7.3	50.0
Diisopropyl ether	Ave	0.2503	0.2439		10.0	0.0500	-2.5	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.3994		2.00	0.0100	-9.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7533		5.00	0.0100	-9.7	50.0
Ethyl acetate	Ave	0.2395	0.2024		4.00	0.0200	-15.5	50.0
Propionitrile	Ave	0.0400	0.0342		4.00	0.0200	-14.6	50.0
Methacrylonitrile	Ave	0.1598	0.1386		2.00	0.0100	-13.2	50.0
Isobutyl alcohol	Ave	0.0099	0.0079		50.0	0.200	-20.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5910		5.00	0.0100	-12.3	50.0
n-Heptane	Ave	0.0746	0.0672		1.00	0.0100	-10.0	50.0
n-Butanol	Ave	0.0094	0.0063		50.0	0.200	-33.2	50.0
Methyl methacrylate	Ave	0.2093	0.1765		2.00	0.0100	-15.7	50.0
2-Nitropropane	Ave	0.0449	0.0326		2.00	0.0200	-27.3	50.0
Cyclohexanone	Ave	0.1078	0.0851		20.0	0.100	-21.1	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.072		0.00923	0.0100	-7.7	50.0
2-Methylnaphthalene	Ave	0.9621	0.0913		5.00	0.0200	-90.5*	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: BFB418.D BFB Injection Date: 08/20/2013

Instrument ID: A3UX17 BFB Injection Time: 13:14

Analysis Batch No.: 98201

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.1	
75	30.0 - 60.0 % of mass 95	44.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	85.3	
175	5.0 - 9.0 % of mass 174	6.1	(7.1)1
176	95.0 - 101.0 % of mass 174	82.6	(96.8)1
177	5.0 - 9.0 % of mass 176	5.5	(6.6)2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-98201/2	UXR7071.D	08/20/2013	13:40
	CCV 240-98201/3	UXR7072.D	08/20/2013	14:03
	LCS 240-98201/4	UXR7073.D	08/20/2013	14:25
	MB 240-98201/6	UXR7075.D	08/20/2013	15:10
MSA-SW45D-081513	240-28011-36	UXR7089.D	08/20/2013	20:33
EL-SW01A-081513	240-28011-37	UXR7090.D	08/20/2013	20:55
EL-SW01B-081513	240-28011-38	UXR7091.D	08/20/2013	21:17
EL-SW01C-081513	240-28011-39	UXR7092.D	08/20/2013	21:39
EL-SW01D-081513	240-28011-40	UXR7093.D	08/20/2013	22:01
TB-081513	240-28011-41	UXR7094.D	08/20/2013	22:23
	240-28014-B-3 MS	UXR7097.D	08/20/2013	23:29
	240-28014-B-3 MSD	UXR7098.D	08/20/2013	23:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.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	0.2884	0.2447		1.00	0.0100	-15.1	50.0
Chloromethane	Ave	0.3681	0.3358	0.1000	1.00	0.0100	-8.8	50.0
Vinyl chloride	Ave	0.3340	0.3014		1.00	0.0100	-9.8	20.0
Bromomethane	Qua		0.1058		1.00	0.0100	-9.4	50.0
Chloroethane	Ave	0.0993	0.0849		1.00	0.0100	-14.4	50.0
Trichlorofluoromethane	Ave	0.2327	0.2226		1.00	0.0100	-4.4	50.0
Acrolein	Ave	0.0353	0.0273		20.0	0.100	-22.6	50.0
1,1-Dichloroethene	Ave	0.2706	0.2674		1.00	0.0100	-1.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2196		1.00	0.0100	3.8	50.0
Acetone	Lin1		0.0753		10.0	0.0200	-12.2	50.0
Iodomethane	Ave	0.3777	0.3621		1.00	0.0100	-4.1	50.0
Carbon disulfide	Ave	0.7404	0.6825		1.00	0.0100	-7.8	50.0
Acetonitrile	Ave	0.0366	0.0328		20.0	0.100	-10.4	50.0
Methyl acetate	Ave	0.2245	0.2053		10.0	0.0200	-8.6	50.0
Methylene Chloride	Lin1		0.3617		1.00	0.0100	17.7	50.0
tert-Butyl alcohol	Ave	0.0217	0.0167		50.0	0.200	-23.2	50.0
Acrylonitrile	Ave	0.1133	0.1019		20.0	0.0200	-10.1	50.0
Methyl tert-butyl ether	Ave	0.7461	0.6714		1.00	0.0100	-10.0	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2897		1.00	0.0100	-0.9	50.0
Hexane	Ave	0.0800	0.0738		1.00	0.0100	-7.8	20.0
1,1-Dichloroethane	Ave	0.4956	0.4711	0.1000	1.00	0.0100	-4.9	50.0
Vinyl acetate	Ave	0.0394	0.0290		2.00	0.0100	-26.4	50.0
2,2-Dichloropropane	Ave	0.2628	0.2273		1.00	0.0100	-13.5	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3007		1.00	0.0100	-2.3	50.0
2-Butanone	Ave	0.1234	0.1084		10.0	0.0200	-12.2	50.0
Bromochloromethane	Ave	0.1447	0.1444		1.00	0.0100	-0.2	50.0
Tetrahydrofuran	Lin1		0.0719		5.00	0.0100	-8.6	50.0
Chloroform	Ave	0.4491	0.4408		1.00	0.0100	-1.8	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3354		1.00	0.0100	-4.2	50.0
Cyclohexane	Ave	0.5833	0.5492		1.00	0.0100	-5.8	50.0
1,1-Dichloropropene	Ave	0.3641	0.3608		1.00	0.0100	-0.9	50.0
Carbon tetrachloride	Ave	0.3098	0.3037		1.00	0.0100	-2.0	50.0
Benzene	Ave	1.187	1.138		1.00	0.0100	-4.2	50.0
1,2-Dichloroethane	Ave	0.3411	0.3470		1.00	0.0100	1.7	50.0
Trichloroethene	Ave	0.3009	0.2948		1.00	0.0100	-2.0	50.0
Methylcyclohexane	Ave	0.5046	0.4822		1.00	0.0100	-4.5	50.0
1,2-Dichloropropane	Ave	0.2812	0.2756		1.00	0.0100	-2.0	20.0
1,4-Dioxane	Ave	0.0028	0.0026		50.0	0.500	-9.2	50.0
Dibromomethane	Ave	0.1440	0.1419		1.00	0.0100	-1.5	50.0
Bromodichloromethane	Ave	0.3100	0.2891		1.00	0.0100	-6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.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
2-Chloroethyl vinyl ether	Ave	0.1461	0.1350		10.0	0.0200	-7.6	50.0
cis-1,3-Dichloropropene	Ave	0.3819	0.3552		1.00	0.0100	-7.0	50.0
4-Methyl-2-pentanone	Ave	0.2420	0.2097		10.0	0.0200	-13.4	50.0
Toluene	Ave	1.519	1.525		1.00	0.0100	0.3	20.0
trans-1,3-Dichloropropene	Ave	0.3963	0.3630		1.00	0.0100	-8.4	50.0
Ethyl methacrylate	Ave	0.4073	0.3785		1.00	0.0100	-7.1	50.0
1,1,2-Trichloroethane	Ave	0.2905	0.2835		1.00	0.0100	-2.4	50.0
Tetrachloroethene	Ave	0.3161	0.3288		1.00	0.0100	4.0	50.0
1,3-Dichloropropane	Ave	0.5076	0.5052		1.00	0.0100	-0.5	50.0
2-Hexanone	Ave	0.2001	0.1778		10.0	0.0200	-11.1	50.0
Dibromochloromethane	Ave	0.2687	0.2596		1.00	0.0100	-3.4	50.0
1,2-Dibromoethane	Ave	0.2878	0.2879		1.00	0.0100	0.0	50.0
Chlorobenzene	Ave	1.011	1.011	0.3000	1.00	0.0100	-0.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3174	0.3139		1.00	0.0100	-1.1	50.0
Ethylbenzene	Ave	0.5334	0.5342		1.00	0.0100	0.1	20.0
m-Xylene & p-Xylene	Ave	0.6612	0.6789		2.00	0.0200	2.7	50.0
o-Xylene	Ave	0.6180	0.6409		1.00	0.0100	3.7	50.0
Styrene	Ave	0.999	1.038		1.00	0.0100	3.9	50.0
Bromoform	Ave	0.1619	0.1518	0.1000	1.00	0.0100	-6.2	50.0
Isopropylbenzene	Ave	1.572	1.574		1.00	0.0100	0.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6334	0.5805	0.3000	1.00	0.0100	-8.4	50.0
Bromobenzene	Ave	0.7771	0.7557		1.00	0.0100	-2.7	50.0
1,2,3-Trichloropropane	Ave	0.2100	0.1970		1.00	0.0100	-6.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1273	0.1183		1.00	0.0100	-7.1	50.0
n-Propylbenzene	Ave	0.8054	0.8095		1.00	0.0100	0.5	50.0
2-Chlorotoluene	Ave	0.6938	0.6885		1.00	0.0100	-0.8	50.0
1,3,5-Trimethylbenzene	Ave	2.309	2.266		1.00	0.0100	-1.9	50.0
4-Chlorotoluene	Ave	0.7442	0.7317		1.00	0.0100	-1.7	50.0
tert-Butylbenzene	Ave	2.137	2.059		1.00	0.0100	-3.7	50.0
1,2,4-Trimethylbenzene	Ave	2.335	2.285		1.00	0.0100	-2.2	50.0
sec-Butylbenzene	Ave	2.858	2.751		1.00	0.0100	-3.7	50.0
1,3-Dichlorobenzene	Ave	1.449	1.386		1.00	0.0100	-4.3	50.0
p-Isopropyltoluene	Ave	2.470	2.405		1.00	0.0100	-2.7	50.0
1,4-Dichlorobenzene	Ave	1.492	1.460		1.00	0.0100	-2.1	50.0
n-Butylbenzene	Ave	2.012	1.841		1.00	0.0100	-8.5	50.0
1,2-Dichlorobenzene	Ave	1.360	1.305		1.00	0.0100	-4.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0966	0.0708		2.00	0.0100	-26.7	50.0
1,3,5-Trichlorobenzene	Ave	1.048	0.9233		1.00	0.0100	-11.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9128	0.6966		1.00	0.0100	-23.7	50.0
Hexachlorobutadiene	Qua		0.3304		1.00	0.0100	-21.4	50.0
Naphthalene	Ave	1.729	1.090		1.00	0.0100	-37.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98201/2 Calibration Date: 08/20/2013 13:40

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7071.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
1,2,3-Trichlorobenzene	Qua		0.5146		1.00	0.0100	-38.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2312	0.2052		0.00791	0.00891	-11.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2790	0.2353		0.00751	0.00891	-15.7	50.0
Toluene-d8 (Surr)	Ave	1.297	1.154		0.00793	0.00891	-11.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4759	0.4383		0.00821	0.00891	-7.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCV 240-98201/3 Calibration Date: 08/20/2013 14:03

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 18:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 20:01

Lab File ID: UXR7072.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
Dichlorofluoromethane	Ave	0.3269	0.2989		2.00	0.0100	-8.6	50.0
Ethyl ether	Ave	0.2516	0.2385		2.00	0.0100	-5.2	50.0
3-Chloro-1-propene	Ave	0.1282	0.1197		2.00	0.0100	-6.6	50.0
Diisopropyl ether	Ave	0.2503	0.2430		10.0	0.0500	-2.9	50.0
2-Chloro-1,3-butadiene	Ave	0.4389	0.4261		2.00	0.0100	-2.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8346	0.7310		5.00	0.0100	-12.4	50.0
Ethyl acetate	Ave	0.2395	0.2200		4.00	0.0200	-8.1	50.0
~~Propionitrile~~	Ave	0.0400	~~0.0350~~		4.00	0.0200	-12.6	50.0
Methacrylonitrile	Ave	0.1598	0.1428		2.00	0.0100	-10.6	50.0
~~Isobutyl alcohol~~	Ave	0.0099	~~0.0091~~		50.0	0.200	-8.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6741	0.5897		5.00	0.0100	-12.5	50.0
n-Heptane	Ave	0.0746	0.0767		1.00	0.0100	2.7	50.0
~~n-Butanol~~	Ave	0.0094	~~0.0070~~		50.0	0.200	~~-26.0~~	50.0
Methyl methacrylate	Ave	0.2093	0.1908		2.00	0.0100	-8.8	50.0
~~2-Nitropropane~~	Ave	0.0449	~~0.0363~~		2.00	0.0200	-19.3	50.0
Cyclohexanone	Ave	0.1078	0.0875		20.0	0.100	-18.8	50.0
1,2,3-Trimethylbenzene	Ave	2.246	2.241		0.00998	0.0100	-0.2	50.0
2-Methylnaphthalene	Ave	0.9621			5.00	0.0200		

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7069.D

Lab ID: 240-28011-16 MS Client ID: MSA-SW40D-081513 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	8.93	89	64-118	
1,1,1-Trichloroethane	10.0	1.0 U	9.14	91	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	8.05	81	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	11.2	112	70-152	
1,1-Dichloroethane	10.0	1.0 U	9.13	91	79-116	
1,1-Dichloroethene	10.0	1.0 U	9.53	95	74-135	
1,1-Dichloropropene	10.0	1.0 U	8.39	84	80-114	
1,2,3-Trichlorobenzene	10.0	1.0 U	5.29	53	45-129	
1,2,3-Trichloropropane	10.0	1.0 U	8.39	84	67-132	
1,2,3-Trimethylbenzene	10.0	5.0 U	9.62	96	70-130	
1,2,4-Trichlorobenzene	10.0	1.0 U	6.67	67	38-138	
1,2,4-Trimethylbenzene	10.0	1.0 U	9.19	92	67-124	
1,2-Dibromo-3-Chloropropane	10.0	5.0 U	6.35	64	32-139	
1,2-Dibromoethane	10.0	1.0 U	9.05	90	74-113	
1,2-Dichlorobenzene	10.0	1.0 U	8.96	90	75-111	
1,2-Dichloroethane	10.0	1.0 U	9.29	93	68-129	
1,2-Dichloropropane	10.0	1.0 U	9.19	92	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	8.96	90	73-110	
1,3-Dichloropropane	10.0	1.0 U	9.27	93	74-118	
1,4-Dichlorobenzene	10.0	1.0 U	8.86	89	75-110	
2,2-Dichloropropane	10.0	1.0 U	8.39	84	38-127	
2-Butanone	20.0	5.0 U	14.8	74	54-129	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-150	F
2-Chlorotoluene	10.0	1.0 U	9.09	91	69-117	
2-Hexanone	20.0	5.0 U	15.2	76	47-139	
4-Chlorotoluene	10.0	1.0 U	8.82	88	71-116	
4-Methyl-2-pentanone	20.0	5.0 U	15.1	75	56-131	
Acetone	20.0	5.0 U	15.3	76	33-145	
Benzene	10.0	0.22 J	9.21	90	72-121	
Bromobenzene	10.0	1.0 U	9.00	90	71-116	
Bromochloromethane	10.0	1.0 U	9.21	92	73-121	
Bromodichloromethane	10.0	1.0 U	8.83	88	67-120	
Bromoform	10.0	1.0 U	8.20	82	32-128	
Bromomethane	10.0	1.0 U	8.50	85	10-186	
Carbon disulfide	10.0	1.0 U	9.61	96	57-147	
Carbon tetrachloride	10.0	1.0 U	9.42	94	59-129	
Chlorobenzene	10.0	1.0 U	9.29	93	80-110	
Chloroethane	10.0	1.0 U	8.52	85	21-165	
Chloroform	10.0	1.0 U	9.22	92	76-118	
Chloromethane	10.0	1.0 U	8.27	83	33-132	
cis-1,2-Dichloroethene	10.0	0.26 J	9.53	93	70-120	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7069.D

Lab ID: 240-28011-16 MS Client ID: MSA-SW40D-081513 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	10.0	1.0 U	8.11	81	51-110	
Dibromochloromethane	10.0	1.0 U	8.79	88	56-118	
Dibromomethane	10.0	1.0 U	9.06	91	77-121	
Dichlorodifluoromethane	10.0	1.0 U	8.98	90	17-128	
Diisopropyl ether	10.0	5.0 U	9.06	91	73-118	
Ethylbenzene	10.0	1.0 U	9.51	95	75-116	
Hexachlorobutadiene	10.0	1.0 U	7.03	70	27-132	
Isopropylbenzene	10.0	1.0 U	9.51	95	68-116	
Methyl tert-butyl ether	10.0	1.0 U	8.12	81	46-144	
Methylene Chloride	10.0	1.0 U	8.35	83	63-128	
m-Xylene & p-Xylene	20.0	2.0 U	19.6	98	75-117	
Naphthalene	10.0	1.0 U	5.42	54	15-158	
n-Butylbenzene	10.0	1.0 U	8.67	87	56-127	
n-Propylbenzene	10.0	1.0 U	9.36	94	64-124	
o-Xylene	10.0	1.0 U	9.89	99	76-116	
p-Isopropyltoluene	10.0	1.0 U	9.42	94	64-122	
sec-Butylbenzene	10.0	1.0 U	8.69	87	60-119	
Styrene	10.0	1.0 U	9.94	99	71-117	
tert-Butyl alcohol	200	20 U	134	67	70-130	F
tert-Butylbenzene	10.0	1.0 U	8.81	88	61-119	
Tetrachloroethene	10.0	1.0 U	9.74	97	70-117	
Toluene	10.0	0.29 J	9.53	92	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.31	93	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	8.17	82	46-116	
Trichloroethene	10.0	0.44 J	9.88	94	66-120	
Trichlorofluoromethane	10.0	1.0 U	9.43	94	46-157	
Vinyl acetate	10.0	2.0 U	8.80	88	43-157	
Vinyl chloride	10.0	0.50 U	8.98	90	49-130	
Xylenes, Total	30.0	2.0 U	29.5	98	76-116	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7070.D

Lab ID: 240-28011-16 MSD Client ID: MSA-SW40D-081513 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.07	91	2	30	64-118	
1,1,1-Trichloroethane	10.0	9.31	93	2	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	8.48	85	5	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.3	113	0	30	70-152	
1,1-Dichloroethane	10.0	9.35	94	2	30	79-116	
1,1-Dichloroethene	10.0	9.80	98	3	30	74-135	
1,1-Dichloropropene	10.0	8.81	88	5	30	80-114	
1,2,3-Trichlorobenzene	10.0	7.02	70	28	30	45-129	
1,2,3-Trichloropropane	10.0	8.81	88	5	30	67-132	
1,2,3-Trimethylbenzene	10.0	10.3	103	7	30	70-130	
1,2,4-Trichlorobenzene	10.0	7.79	78	15	30	38-138	
1,2,4-Trimethylbenzene	10.0	9.61	96	4	30	67-124	
1,2-Dibromo-3-Chloropropane	10.0	7.42	74	15	30	32-139	
1,2-Dibromoethane	10.0	9.06	91	0	30	74-113	
1,2-Dichlorobenzene	10.0	9.33	93	4	30	75-111	
1,2-Dichloroethane	10.0	9.58	96	3	30	68-129	
1,2-Dichloropropane	10.0	9.29	93	1	30	78-115	
1,3-Dichlorobenzene	10.0	9.34	93	4	30	73-110	
1,3-Dichloropropane	10.0	9.35	94	1	30	74-118	
1,4-Dichlorobenzene	10.0	9.34	93	5	30	75-110	
2,2-Dichloropropane	10.0	9.08	91	8	30	38-127	
2-Butanone	20.0	15.8	79	7	30	54-129	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	30	10-150	F
2-Chlorotoluene	10.0	9.35	94	3	30	69-117	
2-Hexanone	20.0	16.3	82	7	30	47-139	
4-Chlorotoluene	10.0	9.49	95	7	30	71-116	
4-Methyl-2-pentanone	20.0	16.3	81	8	30	56-131	
Acetone	20.0	16.8	84	10	30	33-145	
Benzene	10.0	9.41	92	2	30	72-121	
Bromobenzene	10.0	9.46	95	5	30	71-116	
Bromochloromethane	10.0	9.18	92	0	30	73-121	
Bromodichloromethane	10.0	9.14	91	3	30	67-120	
Bromoform	10.0	8.49	85	3	30	32-128	
Bromomethane	10.0	9.94	99	16	30	10-186	
Carbon disulfide	10.0	9.98	100	4	30	57-147	
Carbon tetrachloride	10.0	9.78	98	4	30	59-129	
Chlorobenzene	10.0	9.39	94	1	30	80-110	
Chloroethane	10.0	10.9	109	25	30	21-165	
Chloroform	10.0	9.44	94	2	30	76-118	
Chloromethane	10.0	9.10	91	9	30	33-132	
cis-1,2-Dichloroethene	10.0	9.87	96	3	30	70-120	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7070.D

Lab ID: 240-28011-16 MSD Client ID: MSA-SW40D-081513 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
cis-1,3-Dichloropropene	10.0	8.42	84	4	30	51-110	
Dibromochloromethane	10.0	8.93	89	1	30	56-118	
Dibromomethane	10.0	9.46	95	4	30	77-121	
Dichlorodifluoromethane	10.0	9.14	91	2	30	17-128	
Diisopropyl ether	10.0	9.50	95	5	30	73-118	
Ethylbenzene	10.0	9.69	97	2	30	75-116	
Hexachlorobutadiene	10.0	8.03	80	13	30	27-132	
Isopropylbenzene	10.0	9.60	96	1	30	68-116	
Methyl tert-butyl ether	10.0	8.68	87	7	30	46-144	
Methylene Chloride	10.0	8.68	87	4	30	63-128	
m-Xylene & p-Xylene	20.0	19.8	99	1	30	75-117	
Naphthalene	10.0	7.10	71	27	30	15-158	
n-Butylbenzene	10.0	9.31	93	7	30	56-127	
n-Propylbenzene	10.0	9.90	99	6	30	64-124	
o-Xylene	10.0	9.89	99	0	30	76-116	
p-Isopropyltoluene	10.0	9.95	99	5	30	64-122	
sec-Butylbenzene	10.0	9.25	92	6	30	60-119	
Styrene	10.0	10.0	100	1	30	71-117	
tert-Butyl alcohol	200	150	75	11	30	70-130	
tert-Butylbenzene	10.0	9.27	93	5	30	61-119	
Tetrachloroethene	10.0	9.88	99	1	30	70-117	
Toluene	10.0	9.59	93	1	30	78-114	
trans-1,2-Dichloroethene	10.0	9.49	95	2	30	80-119	
trans-1,3-Dichloropropene	10.0	8.44	84	3	30	46-116	
Trichloroethene	10.0	10.1	96	2	30	66-120	
Trichlorofluoromethane	10.0	9.93	99	5	30	46-157	
Vinyl acetate	10.0	9.26	93	5	30	43-157	
Vinyl chloride	10.0	9.14	91	2	30	49-130	
Xylenes, Total	30.0	29.7	99	1	30	76-116	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7042.D

Lab ID: 240-27783-D-15 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	2.6	12.4	98	68-121	
1,1-Dichloroethane	10.0	1.1	10.7	97	79-116	
1,1-Dichloroethene	10.0	0.21 J	9.52	93	74-135	
1,2-Dichloroethane	10.0	1.0 U	9.83	98	68-129	
cis-1,2-Dichloroethene	10.0	1.0 U	10.1	101	70-120	
Ethylbenzene	10.0	1.0 U	9.50	95	75-116	
Methylene Chloride	10.0	1.0 U	9.31	93	63-128	
Tetrachloroethene	10.0	0.57 J	9.66	91	70-117	
Toluene	10.0	1.0 U	9.27	93	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.59	96	80-119	
Trichloroethene	10.0	0.28 J	9.81	95	66-120	
Vinyl chloride	10.0	0.50 U	8.43	84	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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7043.D

Lab ID: 240-27783-I-15 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	11.8	92	4	30	68-121	
1,1-Dichloroethane	10.0	10.2	92	5	30	79-116	
1,1-Dichloroethene	10.0	9.23	90	3	30	74-135	
1,2-Dichloroethane	10.0	9.44	94	4	30	68-129	
cis-1,2-Dichloroethene	10.0	9.62	96	5	30	70-120	
Ethylbenzene	10.0	8.83	88	7	30	75-116	
Methylene Chloride	10.0	8.65	86	7	30	63-128	
Tetrachloroethene	10.0	9.02	84	7	30	70-117	
Toluene	10.0	8.95	90	3	30	78-114	
trans-1,2-Dichloroethene	10.0	9.13	91	5	30	80-119	
Trichloroethene	10.0	9.41	91	4	30	66-120	
Vinyl chloride	10.0	7.88	79	7	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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7097.D

Lab ID: 240-28014-B-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	500 U	2010	40	64-118	F
1,1,1-Trichloroethane	5000	500 U	2040	41	68-121	F
1,1,2,2-Tetrachloroethane	5000	500 U	1910	38	63-122	F
1,1,2-Trichloro-1,2,2-trichfluoroethane	5000	500 U	2590	52	70-152	F
1,1-Dichloroethane	5000	500 U	2140	43	79-116	F
1,1-Dichloroethene	5000	500 U	2320	46	74-135	F
1,1-Dichloropropene	5000	500 U	1980	40	80-114	F
1,2,3-Trichlorobenzene	5000	500 U	1170	23	45-129	F
1,2,3-Trichloropropane	5000	500 U	2060	41	67-132	F
1,2,3-Trimethylbenzene	5000	2500 U	2110 J	42	70-130	F
1,2,4-Trichlorobenzene	5000	500 U	1470	29	38-138	F
1,2,4-Trimethylbenzene	5000	500 U	1940	39	67-124	F
1,2-Dibromo-3-Chloropropane	5000	2500 U	1390 J	28	32-139	F
1,2-Dibromoethane	5000	500 U	2030	41	74-113	F
1,2-Dichlorobenzene	5000	500 U	2040	41	75-111	F
1,2-Dichloroethane	5000	500 U	2300	46	68-129	F
1,2-Dichloropropane	5000	500 U	2090	42	78-115	F
1,3-Dichlorobenzene	5000	500 U	2120	42	73-110	F
1,3-Dichloropropane	5000	500 U	2100	42	74-118	F
1,4-Dichlorobenzene	5000	500 U	2160	43	75-110	F
2,2-Dichloropropane	5000	500 U	1780	36	38-127	F
2-Butanone	10000	2500 U	3720	37	54-129	F
2-Chloroethyl vinyl ether	5000	5000 U	1350 J	27	10-150	
2-Chlorotoluene	5000	500 U	2030	41	69-117	F
2-Hexanone	10000	2500 U	3350	33	47-139	F
4-Chlorotoluene	5000	500 U	2060	41	71-116	F
4-Methyl-2-pentanone	10000	2500 U	3330	33	56-131	F
Acetone	10000	2500 U	3510	35	33-145	
Benzene	5000	86 J	2220	43	72-121	F
Bromobenzene	5000	500 U	2040	41	71-116	F
Bromochloromethane	5000	500 U	2180	44	73-121	F
Bromodichloromethane	5000	500 U	1980	40	67-120	F
Bromoform	5000	500 U	1660	33	32-128	
Bromomethane	5000	500 U	2280	46	10-186	
Carbon disulfide	5000	500 U	2190	44	57-147	F
Carbon tetrachloride	5000	500 U	2050	41	59-129	F
Chlorobenzene	5000	500 U	2210	44	80-110	F
Chloroethane	5000	500 U	2590	52	21-165	
Chloroform	5000	500 U	2160	43	76-118	F
Chloromethane	5000	500 U	2170	43	33-132	
cis-1,2-Dichloroethene	5000	500 U	2180	44	70-120	F

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7097.D

Lab ID: 240-28014-B-3 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	5000	500 U	1690	34	51-110	F
Dibromochloromethane	5000	500 U	1800	36	56-118	F
Dibromomethane	5000	500 U	2160	43	77-121	F
Dichlorodifluoromethane	5000	500 U	2100	42	17-128	
Diisopropyl ether	5000	2500 U	1970 J	39	73-118	F
Ethylbenzene	5000	500 U	2060	41	75-116	F
Hexachlorobutadiene	5000	500 U	1420	28	27-132	
Isopropylbenzene	5000	500 U	1990	40	68-116	F
Methyl tert-butyl ether	5000	500 U	1820	36	46-144	F
Methylene Chloride	5000	500 U	2050	41	63-128	F
m-Xylene & p-Xylene	10000	1000 U	4300	43	75-117	F
Naphthalene	5000	500 U	1070	21	15-158	
n-Butylbenzene	5000	500 U	1800	36	56-127	F
n-Propylbenzene	5000	500 U	2060	41	64-124	F
o-Xylene	5000	500 U	2100	42	76-116	F
p-Isopropyltoluene	5000	500 U	1990	40	64-122	F
sec-Butylbenzene	5000	500 U	1900	38	60-119	F
Styrene	5000	500 U	2130	43	71-117	F
tert-Butyl alcohol	100000	10000 U	31000	31	70-130	F
tert-Butylbenzene	5000	500 U	1870	37	61-119	F
Tetrachloroethene	5000	500 U	2210	44	70-117	F
Toluene	5000	500 U	2160	43	78-114	F
trans-1,2-Dichloroethene	5000	500 U	2240	45	80-119	F
trans-1,3-Dichloropropene	5000	500 U	1600	32	46-116	F
Trichloroethene	5000	500 U	2170	43	66-120	F
Trichlorofluoromethane	5000	500 U	2280	46	46-157	
Vinyl acetate	5000	1000 U	1840	37	43-157	F
Vinyl chloride	5000	5800	9200	68	49-130	
Xylenes, Total	15000	1000 U	6400	43	76-116	F

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7098.D

Lab ID: 240-28014-B-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5000	1440	29	33	30	64-118	F
1,1,1-Trichloroethane	5000	1530	31	29	30	68-121	F
1,1,2,2-Tetrachloroethane	5000	1430	29	28	30	63-122	F
1,1,2-Trichloro-1,2,2-trichfluoroethane	5000	1950	39	28	30	70-152	F
1,1-Dichloroethane	5000	1650	33	26	30	79-116	F
1,1-Dichloroethene	5000	1690	34	32	30	74-135	F
1,1-Dichloropropene	5000	1440	29	32	30	80-114	F
1,2,3-Trichlorobenzene	5000	1160	23	1	30	45-129	F
1,2,3-Trichloropropane	5000	1440	29	35	30	67-132	F
1,2,3-Trimethylbenzene	5000	1580 J	32	29	30	70-130	F
1,2,4-Trichlorobenzene	5000	1230	25	18	30	38-138	F
1,2,4-Trimethylbenzene	5000	1430	29	31	30	67-124	F
1,2-Dibromo-3-Chloropropane	5000	1070 J	21	27	30	32-139	F
1,2-Dibromoethane	5000	1520	30	29	30	74-113	F
1,2-Dichlorobenzene	5000	1620	32	23	30	75-111	F
1,2-Dichloroethane	5000	1690	34	30	30	68-129	F
1,2-Dichloropropane	5000	1540	31	30	30	78-115	F
1,3-Dichlorobenzene	5000	1570	31	30	30	73-110	F
1,3-Dichloropropane	5000	1590	32	28	30	74-118	F
1,4-Dichlorobenzene	5000	1700	34	24	30	75-110	F
2,2-Dichloropropane	5000	1340	27	28	30	38-127	F
2-Butanone	10000	2930	29	24	30	54-129	F
2-Chloroethyl vinyl ether	5000	949 J	19	35	30	10-150	F
2-Chlorotoluene	5000	1560	31	26	30	69-117	F
2-Hexanone	10000	2390 J	24	33	30	47-139	F
4-Chlorotoluene	5000	1510	30	31	30	71-116	F
4-Methyl-2-pentanone	10000	2400 J	24	33	30	56-131	F
Acetone	10000	2680	27	27	30	33-145	F
Benzene	5000	1680	32	28	30	72-121	F
Bromobenzene	5000	1610	32	24	30	71-116	F
Bromochloromethane	5000	1700	34	25	30	73-121	F
Bromodichloromethane	5000	1450	29	31	30	67-120	F
Bromoform	5000	1190	24	34	30	32-128	F
Bromomethane	5000	1760	35	26	30	10-186	
Carbon disulfide	5000	1660	33	27	30	57-147	F
Carbon tetrachloride	5000	1540	31	29	30	59-129	F
Chlorobenzene	5000	1650	33	29	30	80-110	F
Chloroethane	5000	2110	42	20	30	21-165	
Chloroform	5000	1620	32	29	30	76-118	F
Chloromethane	5000	1620	32	29	30	33-132	F
cis-1,2-Dichloroethene	5000	1660	33	27	30	70-120	F

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7098.D

Lab ID: 240-28014-B-3 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
cis-1,3-Dichloropropene	5000	1260	25	29	30	51-110	F
Dibromochloromethane	5000	1330	27	30	30	56-118	F
Dibromomethane	5000	1670	33	26	30	77-121	F
Dichlorodifluoromethane	5000	1560	31	29	30	17-128	
Diisopropyl ether	5000	1480 J	30	29	30	73-118	F
Ethylbenzene	5000	1480	30	33	30	75-116	F
Hexachlorobutadiene	5000	1140	23	22	30	27-132	F
Isopropylbenzene	5000	1410	28	34	30	68-116	F
Methyl tert-butyl ether	5000	1340	27	30	30	46-144	F
Methylene Chloride	5000	1530	31	29	30	63-128	F
m-Xylene & p-Xylene	10000	3060	31	33	30	75-117	F
Naphthalene	5000	981	20	9	30	15-158	
n-Butylbenzene	5000	1340	27	29	30	56-127	F
n-Propylbenzene	5000	1490	30	32	30	64-124	F
o-Xylene	5000	1510	30	33	30	76-116	F
p-Isopropyltoluene	5000	1440	29	32	30	64-122	F
sec-Butylbenzene	5000	1380	28	31	30	60-119	F
Styrene	5000	1520	30	34	30	71-117	F
tert-Butyl alcohol	100000	22900	23	30	30	70-130	F
tert-Butylbenzene	5000	1370	27	31	30	61-119	F
Tetrachloroethene	5000	1630	33	30	30	70-117	F
Toluene	5000	1570	31	31	30	78-114	F
trans-1,2-Dichloroethene	5000	1670	33	29	30	80-119	F
trans-1,3-Dichloropropene	5000	1220	24	27	30	46-116	F
Trichloroethene	5000	1640	33	28	30	66-120	F
Trichlorofluoromethane	5000	1740	35	27	30	46-157	F
Vinyl acetate	5000	1350	27	31	30	43-157	F
Vinyl chloride	5000	7910	42	15	30	49-130	F
Xylenes, Total	15000	4570	30	33	30	76-116	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: UXR7021.D Lab Sample ID: MB 240-98060/6

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

Instrument ID: A3UX17 Date Analyzed: 08/19/2013 16:29

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98060/4	UXR7019.D	08/19/2013 15:44
MSA-SW37A-081513	240-28011-1	UXR7022.D	08/19/2013 16:51
MSA-SW37B-081513	240-28011-2	UXR7023.D	08/19/2013 17:14
MSA-SW37C-081513	240-28011-3	UXR7024.D	08/19/2013 17:36
MSA-SW37D-081513	240-28011-4	UXR7025.D	08/19/2013 17:58
MSA-SW38A-081513	240-28011-5	UXR7026.D	08/19/2013 18:21
MSA-SW38B-081513	240-28011-6	UXR7027.D	08/19/2013 18:43
MSA-SW38C-081513	240-28011-7	UXR7028.D	08/19/2013 19:05
MSA-SW38D-081513	240-28011-8	UXR7029.D	08/19/2013 19:27
MSA-SW39A-081513	240-28011-9	UXR7030.D	08/19/2013 19:50
MSA-SW39B-081513	240-28011-10	UXR7031.D	08/19/2013 20:12
MSA-SW39C-081513	240-28011-11	UXR7032.D	08/19/2013 20:35
MSA-SW39D-081513	240-28011-12	UXR7033.D	08/19/2013 20:57
MSA-SW40A-081513	240-28011-13	UXR7034.D	08/19/2013 21:19
MSA-SW40B-081513	240-28011-14	UXR7035.D	08/19/2013 21:42
MSA-SW40C-081513	240-28011-15	UXR7036.D	08/19/2013 22:04
	240-27783-D-15 MS	UXR7042.D	08/20/2013 00:16
	240-27783-I-15 MSD	UXR7043.D	08/20/2013 00:38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98060/6

Matrix: Water | Lab File ID: UXR7021.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/19/2013 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.: 98060 | 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.: 240-28011-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98060/6

Matrix: Water Lab File ID: UXR7021.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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.: 240-28011-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98060/6

Matrix: Water Lab File ID: UXR7021.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2013 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.: 98060 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)	88		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	88		74-115

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7019.D

Lab ID: LCS 240-98060/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.3	103	72-116	
1,1,1-Trichloroethane	10.0	10.3	103	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.66	97	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.3	113	74-151	
1,1-Dichloroethane	10.0	10.2	102	82-115	
1,1-Dichloroethene	10.0	9.94	99	78-131	
1,1-Dichloropropene	10.0	9.72	97	83-114	
1,2,3-Trichlorobenzene	10.0	7.16	72	54-126	
1,2,3-Trichloropropane	10.0	10.1	101	73-129	
1,2,3-Trimethylbenzene	10.0	10.8	108	70-130	
1,2,4-Trichlorobenzene	10.0	8.51	85	48-135	
1,2,4-Trimethylbenzene	10.0	10.3	103	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.55	95	42-136	
1,2-Dibromoethane	10.0	10.2	102	79-113	
1,2-Dichlorobenzene	10.0	9.80	98	81-110	
1,2-Dichloroethane	10.0	10.3	103	71-127	
1,2-Dichloropropane	10.0	10.4	104	81-115	
1,3-Dichlorobenzene	10.0	9.92	99	80-110	
1,3-Dichloropropane	10.0	10.1	101	79-116	
1,4-Dichlorobenzene	10.0	9.77	98	82-110	
2,2-Dichloropropane	10.0	9.87	99	50-129	
2-Butanone	20.0	19.7	98	60-126	
2-Chloroethyl vinyl ether	10.0	10.2	102	52-131	
2-Chlorotoluene	10.0	10.2	102	76-116	
2-Hexanone	20.0	20.4	102	55-133	
4-Chlorotoluene	10.0	9.95	99	77-115	
4-Methyl-2-pentanone	20.0	20.6	103	63-128	
Acetone	20.0	19.6	98	43-136	
Benzene	10.0	9.91	99	83-112	
Bromobenzene	10.0	10.0	100	76-115	
Bromochloromethane	10.0	10.1	101	77-120	
Bromodichloromethane	10.0	10.4	104	72-121	
Bromoform	10.0	10.5	105	40-131	
Bromomethane	10.0	8.34	83	11-185	
Carbon disulfide	10.0	10.2	102	62-142	
Carbon tetrachloride	10.0	10.3	103	66-128	
Chlorobenzene	10.0	10.2	102	85-110	
Chloroethane	10.0	8.45	85	25-153	
Chloroform	10.0	10.0	100	79-117	
Chloromethane	10.0	8.67	87	44-126	
cis-1,2-Dichloroethene	10.0	10.0	100	80-113	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7019.D

Lab ID: LCS 240-98060/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	10.0	10.3	103	61-115	
Dibromochloromethane	10.0	10.3	103	64-119	
Dibromomethane	10.0	10.7	107	81-120	
Dichlorodifluoromethane	10.0	6.63	66	19-129	
Diisopropyl ether	10.0	10.4	104	77-118	
Ethylbenzene	10.0	10.2	102	83-112	
Hexachlorobutadiene	10.0	8.17	82	36-134	
Isopropylbenzene	10.0	10.4	104	75-114	
Methyl tert-butyl ether	10.0	10.2	102	52-144	
Methylene Chloride	10.0	9.60	96	66-131	
m-Xylene & p-Xylene	20.0	20.7	104	83-113	
Naphthalene	10.0	7.78	78	32-141	
n-Butylbenzene	10.0	10.0	100	66-125	
n-Propylbenzene	10.0	10.5	105	74-121	
o-Xylene	10.0	10.6	106	83-113	
p-Isopropyltoluene	10.0	10.6	106	74-120	
sec-Butylbenzene	10.0	9.98	100	70-117	
Styrene	10.0	10.8	108	79-114	
tert-Butyl alcohol	200	206	103	70-130	
tert-Butylbenzene	10.0	10.1	101	71-115	
Tetrachloroethene	10.0	10.1	101	79-114	
Toluene	10.0	9.89	99	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	10.1	101	58-117	
Trichloroethene	10.0	10.2	102	76-117	
Trichlorofluoromethane	10.0	9.44	94	49-157	
Vinyl acetate	10.0	11.3	113	46-161	
Vinyl chloride	10.0	8.69	87	53-127	
Xylenes, Total	30.0	31.3	104	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: UXR7048.D Lab Sample ID: MB 240-98083/6

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

Instrument ID: A3UX17 Date Analyzed: 08/20/2013 03:14

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-98083/4	UXR7046.D	08/20/2013 02:30
MSA-SW40D-081513	240-28011-16	UXR7049.D	08/20/2013 03:37
MSA-SW41A-081513	240-28011-17	UXR7050.D	08/20/2013 03:59
MSA-SW41B-081513	240-28011-18	UXR7051.D	08/20/2013 04:21
MSA-SW41C-081513	240-28011-19	UXR7052.D	08/20/2013 04:44
MSA-SW41D-081513	240-28011-20	UXR7053.D	08/20/2013 05:06
MSA-SW42A-081513	240-28011-21	UXR7054.D	08/20/2013 05:28
MSA-SW42B-081513	240-28011-22	UXR7055.D	08/20/2013 05:50
MSA-SW42C-081513	240-28011-23	UXR7056.D	08/20/2013 06:13
MSA-SW42D-081513	240-28011-24	UXR7057.D	08/20/2013 06:35
MSA-SW43A-081513	240-28011-25	UXR7058.D	08/20/2013 06:57
MSA-SW43B-081513	240-28011-26	UXR7059.D	08/20/2013 07:19
MSA-SW43C-081513	240-28011-27	UXR7060.D	08/20/2013 07:42
MSA-SW43D-081513	240-28011-28	UXR7061.D	08/20/2013 08:04
MSA-SW44A-081513	240-28011-29	UXR7062.D	08/20/2013 08:26
MSA-SW44B-081513	240-28011-30	UXR7063.D	08/20/2013 08:48
MSA-SW44C-081513	240-28011-31	UXR7064.D	08/20/2013 09:11
MSA-SW44D-081513	240-28011-32	UXR7065.D	08/20/2013 09:33
MSA-SW45A-081513	240-28011-33	UXR7066.D	08/20/2013 09:55
MSA-SW45B-081513	240-28011-34	UXR7067.D	08/20/2013 10:17
MSA-SW45C-081513	240-28011-35	UXR7068.D	08/20/2013 10:39
MSA-SW40D-081513 MS	240-28011-16 MS	UXR7069.D	08/20/2013 11:27
MSA-SW40D-081513 MSD	240-28011-16 MSD	UXR7070.D	08/20/2013 11:49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 240-98083/6
Matrix: Water | Lab File ID: UXR7048.D
Analysis Method: 8260B | Date Collected:
Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 03:14
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.: 98083 | 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	0.200	J	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.: 240-28011-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98083/6

Matrix: Water Lab File ID: UXR7048.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 03:14

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.: 98083 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.: 240-28011-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98083/6

Matrix: Water | Lab File ID: UXR7048.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 03:14

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.: 98083 | 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)	89		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
1868-53-7	Dibromofluoromethane (Surr)	90		75-121
2037-26-5	Toluene-d8 (Surr)	88		74-115

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7046.D

Lab ID: LCS 240-98083/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.51	95	72-116	
1,1,1-Trichloroethane	10.0	9.44	94	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.63	86	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.67	97	74-151	
1,1-Dichloroethane	10.0	9.53	95	82-115	
1,1-Dichloroethene	10.0	9.43	94	78-131	
1,1-Dichloropropene	10.0	9.16	92	83-114	
1,2,3-Trichlorobenzene	10.0	5.59	56	54-126	
1,2,3-Trichloropropane	10.0	9.01	90	73-129	
1,2,3-Trimethylbenzene	10.0	9.85	98	70-130	
1,2,4-Trichlorobenzene	10.0	6.98	70	48-135	
1,2,4-Trimethylbenzene	10.0	9.23	92	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.09	71	42-136	
1,2-Dibromoethane	10.0	9.55	96	79-113	
1,2-Dichlorobenzene	10.0	8.99	90	81-110	
1,2-Dichloroethane	10.0	9.83	98	71-127	
1,2-Dichloropropane	10.0	9.73	97	81-115	
1,3-Dichlorobenzene	10.0	9.03	90	80-110	
1,3-Dichloropropane	10.0	9.57	96	79-116	
1,4-Dichlorobenzene	10.0	8.89	89	82-110	
2,2-Dichloropropane	10.0	8.43	84	50-129	
2-Butanone	20.0	16.6	83	60-126	
2-Chloroethyl vinyl ether	10.0	8.99 J	90	52-131	
2-Chlorotoluene	10.0	9.14	91	76-116	
2-Hexanone	20.0	16.9	84	55-133	
4-Chlorotoluene	10.0	9.06	91	77-115	
4-Methyl-2-pentanone	20.0	17.8	89	63-128	
Acetone	20.0	16.1	81	43-136	
Benzene	10.0	9.53	95	83-112	
Bromobenzene	10.0	9.46	95	76-115	
Bromochloromethane	10.0	9.58	96	77-120	
Bromodichloromethane	10.0	9.46	95	72-121	
Bromoform	10.0	8.62	86	40-131	
Bromomethane	10.0	8.89	89	11-185	
Carbon disulfide	10.0	9.57	96	62-142	
Carbon tetrachloride	10.0	9.53	95	66-128	
Chlorobenzene	10.0	9.55	95	85-110	
Chloroethane	10.0	11.5	115	25-153	
Chloroform	10.0	9.66	97	79-117	
Chloromethane	10.0	8.16	82	44-126	
cis-1,2-Dichloroethene	10.0	9.87	99	80-113	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7046.D

Lab ID: LCS 240-98083/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	10.0	8.99	90	61-115	
Dibromochloromethane	10.0	9.18	92	64-119	
Dibromomethane	10.0	10.1	101	81-120	
Dichlorodifluoromethane	10.0	5.55	55	19-129	
Diisopropyl ether	10.0	9.96	100	77-118	
Ethylbenzene	10.0	9.32	93	83-112	
Hexachlorobutadiene	10.0	6.77	68	36-134	
Isopropylbenzene	10.0	9.29	93	75-114	
Methyl tert-butyl ether	10.0	9.00	90	52-144	
Methylene Chloride	10.0	9.83	98	66-131	
m-Xylene & p-Xylene	20.0	19.0	95	83-113	
Naphthalene	10.0	6.01	60	32-141	
n-Butylbenzene	10.0	8.38	84	66-125	
n-Propylbenzene	10.0	9.29	93	74-121	
o-Xylene	10.0	9.64	96	83-113	
p-Isopropyltoluene	10.0	9.14	91	74-120	
sec-Butylbenzene	10.0	8.69	87	70-117	
Styrene	10.0	9.83	98	79-114	
tert-Butyl alcohol	200	154	77	70-130	
tert-Butylbenzene	10.0	8.84	88	71-115	
Tetrachloroethene	10.0	9.23	92	79-114	
Toluene	10.0	9.48	95	84-111	
trans-1,2-Dichloroethene	10.0	9.65	96	83-117	
trans-1,3-Dichloropropene	10.0	8.72	87	58-117	
Trichloroethene	10.0	9.63	96	76-117	
Trichlorofluoromethane	10.0	9.49	95	49-157	
Vinyl acetate	10.0	9.22	92	46-161	
Vinyl chloride	10.0	8.17	82	53-127	
Xylenes, Total	30.0	28.6	95	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab File ID: UXR7075.D Lab Sample ID: MB 240-98201/6

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

Instrument ID: A3UX17 Date Analyzed: 08/20/2013 15:10

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 240-98201/4	UXR7073.D	08/20/2013 14:25
MSA-SW45D-081513	240-28011-36	UXR7089.D	08/20/2013 20:33
EL-SW01A-081513	240-28011-37	UXR7090.D	08/20/2013 20:55
EL-SW01B-081513	240-28011-38	UXR7091.D	08/20/2013 21:17
EL-SW01C-081513	240-28011-39	UXR7092.D	08/20/2013 21:39
EL-SW01D-081513	240-28011-40	UXR7093.D	08/20/2013 22:01
TB-081513	240-28011-41	UXR7094.D	08/20/2013 22:23
	240-28014-B-3 MS	UXR7097.D	08/20/2013 23:29
	240-28014-B-3 MSD	UXR7098.D	08/20/2013 23:51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 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.: 240-28011-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-98201/6

Matrix: Water | Lab File ID: UXR7075.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98201 | 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.: 240-28011-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-98201/6

Matrix: Water Lab File ID: UXR7075.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2013 15:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 98201 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)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	84		66-117
1868-53-7	Dibromofluoromethane (Surr)	91		75-121
2037-26-5	Toluene-d8 (Surr)	86		74-115

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7073.D

Lab ID: LCS 240-98201/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.70	97	72-116	
1,1,1-Trichloroethane	10.0	9.74	97	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.21	92	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.6	116	74-151	
1,1-Dichloroethane	10.0	9.88	99	82-115	
1,1-Dichloroethene	10.0	10.2	102	78-131	
1,1-Dichloropropene	10.0	9.41	94	83-114	
1,2,3-Trichlorobenzene	10.0	6.54	65	54-126	
1,2,3-Trichloropropane	10.0	9.72	97	73-129	
1,2,3-Trimethylbenzene	10.0	10.5	105	70-130	
1,2,4-Trichlorobenzene	10.0	7.95	80	48-135	
1,2,4-Trimethylbenzene	10.0	9.84	98	76-120	
1,2-Dibromo-3-Chloropropane	10.0	7.66	77	42-136	
1,2-Dibromoethane	10.0	9.93	99	79-113	
1,2-Dichlorobenzene	10.0	9.61	96	81-110	
1,2-Dichloroethane	10.0	10.1	101	71-127	
1,2-Dichloropropane	10.0	10.1	101	81-115	
1,3-Dichlorobenzene	10.0	9.81	98	80-110	
1,3-Dichloropropane	10.0	10.2	102	79-116	
1,4-Dichlorobenzene	10.0	9.62	96	82-110	
2,2-Dichloropropane	10.0	8.74	87	50-129	
2-Butanone	20.0	17.7	88	60-126	
2-Chloroethyl vinyl ether	10.0	9.23 J	92	52-131	
2-Chlorotoluene	10.0	9.67	97	76-116	
2-Hexanone	20.0	18.2	91	55-133	
4-Chlorotoluene	10.0	9.76	98	77-115	
4-Methyl-2-pentanone	20.0	18.2	91	63-128	
Acetone	20.0	17.1	86	43-136	
Benzene	10.0	10.0	100	83-112	
Bromobenzene	10.0	9.73	97	76-115	
Bromochloromethane	10.0	10.3	103	77-120	
Bromodichloromethane	10.0	9.47	95	72-121	
Bromoform	10.0	9.35	93	40-131	
Bromomethane	10.0	8.82	88	11-185	
Carbon disulfide	10.0	10.1	101	62-142	
Carbon tetrachloride	10.0	10.1	101	66-128	
Chlorobenzene	10.0	10.0	100	85-110	
Chloroethane	10.0	8.75	87	25-153	
Chloroform	10.0	10.0	100	79-117	
Chloromethane	10.0	9.25	92	44-126	
cis-1,2-Dichloroethene	10.0	10.3	103	80-113	

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.: 240-28011-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR7073.D

Lab ID: LCS 240-98201/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	10.0	9.39	94	61-115	
Dibromochloromethane	10.0	9.40	94	64-119	
Dibromomethane	10.0	10.3	103	81-120	
Dichlorodifluoromethane	10.0	9.50	95	19-129	
Diisopropyl ether	10.0	10.1	101	77-118	
Ethylbenzene	10.0	10.2	102	83-112	
Hexachlorobutadiene	10.0	7.72	77	36-134	
Isopropylbenzene	10.0	10.1	101	75-114	
Methyl tert-butyl ether	10.0	9.36	94	52-144	
Methylene Chloride	10.0	12.0	120	66-131	
m-Xylene & p-Xylene	20.0	20.8	104	83-113	
Naphthalene	10.0	6.76	68	32-141	
n-Butylbenzene	10.0	9.44	94	66-125	
n-Propylbenzene	10.0	10.2	102	74-121	
o-Xylene	10.0	10.3	103	83-113	
p-Isopropyltoluene	10.0	10.1	101	74-120	
sec-Butylbenzene	10.0	9.39	94	70-117	
Styrene	10.0	10.5	105	79-114	
tert-Butyl alcohol	200	169	85	70-130	
tert-Butylbenzene	10.0	9.58	96	71-115	
Tetrachloroethene	10.0	10.2	102	79-114	
Toluene	10.0	10.1	101	84-111	
trans-1,2-Dichloroethene	10.0	10.1	101	83-117	
trans-1,3-Dichloropropene	10.0	9.09	91	58-117	
Trichloroethene	10.0	10.1	101	76-117	
Trichlorofluoromethane	10.0	9.87	99	49-157	
Vinyl acetate	10.0	9.85	98	46-161	
Vinyl chloride	10.0	9.22	92	53-127	
Xylenes, Total	30.0	31.1	104	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

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-081513	240-28011-1	95	94	92	95
MSA-SW37B-081513	240-28011-2	95	94	93	92
MSA-SW37C-081513	240-28011-3	91	87	89	88
MSA-SW37D-081513	240-28011-4	89	87	87	88
MSA-SW38A-081513	240-28011-5	88	86	86	87
MSA-SW38B-081513	240-28011-6	90	89	89	89
MSA-SW38C-081513	240-28011-7	88	87	85	85
MSA-SW38D-081513	240-28011-8	89	87	87	87
MSA-SW39A-081513	240-28011-9	90	87	88	89
MSA-SW39B-081513	240-28011-10	87	85	85	85
MSA-SW39C-081513	240-28011-11	87	86	86	84
MSA-SW39D-081513	240-28011-12	92	89	89	86
MSA-SW40A-081513	240-28011-13	90	87	86	83
MSA-SW40B-081513	240-28011-14	87	86	84	83
MSA-SW40C-081513	240-28011-15	92	90	87	89
MSA-SW40D-081513	240-28011-16	91	88	86	86
MSA-SW41A-081513	240-28011-17	90	86	87	86
MSA-SW41B-081513	240-28011-18	89	88	85	83
MSA-SW41C-081513	240-28011-19	90	88	85	83
MSA-SW41D-081513	240-28011-20	88	86	84	82
MSA-SW42A-081513	240-28011-21	91	88	87	86
MSA-SW42B-081513	240-28011-22	89	88	85	83
MSA-SW42C-081513	240-28011-23	89	87	85	81
MSA-SW42D-081513	240-28011-24	89	88	86	83
MSA-SW43A-081513	240-28011-25	93	91	89	86
MSA-SW43B-081513	240-28011-26	88	88	84	82
MSA-SW43C-081513	240-28011-27	88	88	83	82
MSA-SW43D-081513	240-28011-28	89	88	86	85
MSA-SW44A-081513	240-28011-29	89	88	86	82
MSA-SW44B-081513	240-28011-30	90	87	84	82
MSA-SW44C-081513	240-28011-31	89	88	84	81
MSA-SW44D-081513	240-28011-32	89	89	84	82
MSA-SW45A-081513	240-28011-33	94	89	86	85
MSA-SW45B-081513	240-28011-34	92	89	83	81
MSA-SW45C-081513	240-28011-35	89	87	84	81

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-28011-1

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-081513	240-28011-36	89	87	85	83
EL-SW01A-081513	240-28011-37	93	89	87	85
EL-SW01B-081513	240-28011-38	91	90	86	84
EL-SW01C-081513	240-28011-39	92	91	86	83
EL-SW01D-081513	240-28011-40	89	87	84	82
TB-081513	240-28011-41	90	87	84	82
	MB 240-98060/6	91	88	88	91
	MB 240-98083/6	90	89	88	85
	MB 240-98201/6	91	90	86	84
	LCS 240-98060/4	98	92	96	102
	LCS 240-98083/4	92	84	93	98
	LCS 240-98201/4	97	91	94	98
MSA-SW40D-081513 MS	240-28011-16 MS	88	83	89	94
	240-27783-D-15 MS	90	83	89	95
	240-28014-B-3 MS	94	90	90	95
MSA-SW40D-081513 MSD	240-28011-16 MSD	90	86	91	98
	240-27783-I-15 MSD	89	84	90	94
	240-28014-B-3 MSD	87	86	87	90

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Sample No.: STD8260 240-97903/4 Date Analyzed: 08/17/2013 16:41

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7006.D Heated Purge: (Y/N) N

Calibration ID: 16931

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1705267	5.76	1392950	8.48	758712	10.72
UPPER LIMIT		3410534	6.26	2785900	8.98	1517424	11.22
LOWER LIMIT		852634	5.26	696475	7.98	379356	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-98060/2		1860204	5.76	1524121	8.48	848642	10.72
CCVIS 240-98083/2		1677048	5.76	1383512	8.48	775267	10.72
CCVIS 240-98201/2		1736283	5.76	1392825	8.48	803037	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.: 240-28011-1

SDG No.:

Sample No.: CCVIS 240-98060/2 Date Analyzed: 08/19/2013 15:00

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7017.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1860204	5.76	1524121	8.48	848642	10.72
UPPER LIMIT		3720408	6.26	3048242	8.98	1697284	11.22
LOWER LIMIT		930102	5.26	762061	7.98	424321	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98060/3		1794362	5.76	1424352	8.48	775845	10.72
LCS 240-98060/4		1760871	5.76	1447564	8.48	827045	10.72
MB 240-98060/6		1845886	5.76	1506204	8.48	811434	10.72
240-28011-1	MSA-SW37A-081513	1719908	5.76	1420461	8.48	754191	10.72
240-28011-2	MSA-SW37B-081513	1814880	5.76	1470026	8.48	780466	10.72
240-28011-3	MSA-SW37C-081513	1845090	5.76	1479803	8.48	793578	10.72
240-28011-4	MSA-SW37D-081513	1841114	5.76	1476314	8.48	782193	10.72
240-28011-5	MSA-SW38A-081513	1829512	5.76	1495727	8.48	794875	10.72
240-28011-6	MSA-SW38B-081513	1817210	5.76	1464593	8.48	769826	10.72
240-28011-7	MSA-SW38C-081513	1839860	5.76	1476192	8.48	783741	10.72
240-28011-8	MSA-SW38D-081513	1824747	5.76	1453575	8.48	792134	10.72
240-28011-9	MSA-SW39A-081513	1791901	5.76	1429639	8.48	764125	10.72
240-28011-10	MSA-SW39B-081513	1805669	5.76	1449423	8.48	767754	10.72
240-28011-11	MSA-SW39C-081513	1810673	5.76	1440010	8.48	769120	10.72
240-28011-12	MSA-SW39D-081513	1756868	5.76	1423015	8.48	751422	10.72
240-28011-13	MSA-SW40A-081513	1769078	5.76	1446262	8.48	744666	10.72
240-28011-14	MSA-SW40B-081513	1766535	5.76	1444296	8.48	734769	10.72
240-28011-15	MSA-SW40C-081513	1750962	5.76	1445227	8.48	754155	10.72
240-27783-D-15 MS		1725121	5.76	1419740	8.48	810332	10.72
240-27783-I-15 MSD		1789178	5.76	1443868	8.48	822069	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.: 240-28011-1

SDG No.:

Sample No.: CCVIS 240-98083/2 Date Analyzed: 08/20/2013 01:45

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7044.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1677048	5.76	1383512	8.48	775267	10.72
UPPER LIMIT		3354096	6.26	2767024	8.98	1550534	11.22
LOWER LIMIT		838524	5.26	691756	7.98	387634	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98083/3		1786053	5.76	1451234	8.48	754077	10.72
LCS 240-98083/4		1750603	5.76	1425971	8.48	817769	10.72
MB 240-98083/6		1720864	5.76	1391040	8.48	716862	10.72
240-28011-16	MSA-SW40D-081513	1684891	5.76	1370565	8.48	718442	10.72
240-28011-17	MSA-SW41A-081513	1745633	5.76	1406428	8.48	739757	10.72
240-28011-18	MSA-SW41B-081513	1717142	5.76	1407041	8.48	736272	10.72
240-28011-19	MSA-SW41C-081513	1723422	5.76	1419034	8.48	730426	10.72
240-28011-20	MSA-SW41D-081513	1742181	5.76	1403339	8.48	714865	10.72
240-28011-21	MSA-SW42A-081513	1733617	5.76	1388311	8.48	723535	10.72
240-28011-22	MSA-SW42B-081513	1703249	5.76	1383827	8.48	715109	10.72
240-28011-23	MSA-SW42C-081513	1709776	5.76	1384736	8.48	719604	10.72
240-28011-24	MSA-SW42D-081513	1685871	5.76	1362113	8.48	721189	10.72
240-28011-25	MSA-SW43A-081513	1666371	5.76	1340643	8.48	698313	10.72
240-28011-26	MSA-SW43B-081513	1674361	5.76	1355892	8.48	715352	10.72
240-28011-27	MSA-SW43C-081513	1679789	5.76	1359997	8.48	703527	10.72
240-28011-28	MSA-SW43D-081513	1666674	5.76	1355260	8.48	727529	10.72
240-28011-29	MSA-SW44A-081513	1684910	5.76	1367246	8.48	699805	10.72
240-28011-30	MSA-SW44B-081513	1661923	5.76	1351289	8.48	693194	10.72
240-28011-31	MSA-SW44C-081513	1651838	5.76	1337413	8.48	697107	10.72
240-28011-32	MSA-SW44D-081513	1639676	5.76	1339338	8.48	688736	10.72
240-28011-33	MSA-SW45A-081513	1620857	5.76	1322614	8.48	704373	10.72
240-28011-34	MSA-SW45B-081513	1617525	5.76	1336050	8.48	704038	10.72
240-28011-35	MSA-SW45C-081513	1636196	5.76	1318464	8.48	697264	10.72
240-28011-16 MS	MSA-SW40D-081513 MS	1722943	5.76	1377454	8.48	813996	10.72
240-28011-16 MSD	MSA-SW40D-081513 MSD	1717579	5.76	1395869	8.48	801477	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.: 240-28011-1

SDG No.:

Sample No.: CCVIS 240-98201/2 Date Analyzed: 08/20/2013 13:40

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR7071.D Heated Purge: (Y/N) N

Calibration ID: 16934

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1736283	5.76	1392825	8.48	803037	10.72
UPPER LIMIT		3472566	6.26	2785650	8.98	1606074	11.22
LOWER LIMIT		868142	5.26	696413	7.98	401519	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-98201/3		1765049	5.76	1387370	8.48	735631	10.72
LCS 240-98201/4		1656834	5.76	1352788	8.48	789241	10.72
MB 240-98201/6		1638421	5.76	1341152	8.48	693040	10.72
240-28011-36	MSA-SW45D-081513	1751155	5.76	1402188	8.48	745971	10.72
240-28011-37	EL-SW01A-081513	1740274	5.76	1401645	8.48	738952	10.72
240-28011-38	EL-SW01B-081513	1710421	5.76	1399535	8.48	730599	10.72
240-28011-39	EL-SW01C-081513	1659270	5.76	1358699	8.48	708110	10.72
240-28011-40	EL-SW01D-081513	1692117	5.76	1377812	8.48	723327	10.72
240-28011-41	TB-081513	1645921	5.76	1346302	8.48	691947	10.72
240-28014-B-3 MS		1672516	5.76	1354097	8.48	788977	10.72
240-28014-B-3 MSD		1715479	5.76	1380433	8.48	790846	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

VOC CALCULATION

	SAMPLE		
	MSA-SW43A-081513		
TARGET ANALYTE	**trichloroethene**		
ANALYTE RESPONSE	243960		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	1666371		
I.S. CONCENTRATION	10	µg/l	
ANALYTE CAL. RF	0.3009		
DILUTION FACTOR (DF)	1		
INITIAL SAMPLE VOLUME - V1	5	ml	
FINAL SAMPLE VOLUME - V2	5		
(ANALYTE RESPONSE) x (I.S. CONCENTRATION) X DF x V2 / (I.S. RESPONSE) x (CAL. R.F.) x V1	=	4.87	µg/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

SDG No.:

Client Sample ID: MSA-SW43A-081513 | Lab Sample ID: 240-28011-25

Matrix: Water | Lab File ID: UXR7058.D

Analysis Method: 8260B | Date Collected: 08/15/2013 09:47

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2013 06:57

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 98083 | 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	3.4		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	0.28	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	4.9		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	1.1		0.50	0.22

Report Date: 20-Aug-2013 14:08:07 Chrom Revision: 2.0 01-Apr-2013 21:16:10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\NCCHROM\ChromData\A3UX17\20130819-22644.b\UXR7088.D
Lims ID: 240-28011-B-25 Client ID: MSA-SW43A-081513
Inject. Date: 20-Aug-2013 06:57:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0022644-016
Misc. Info.:
Operator: 1644 Instrument ID: A3UX17
Purge Vol: 5.000 mL ALS Bottle#: 44
Lims Batch ID: 98083 Lims Sample ID: 16
Detector: MS SCAN

Method: \\NCCHROM\ChromData\A3UX17\20130819-22644.b\8260_17.m
Last Update: 20-Aug-2013 14:07:57 Calib Date: 17-Aug-2013 20:01:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCCHROM\ChromData\A3UX17\20130817-22594.b\UXR7015.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Column Type: DB-624 Column Dia: 0.18 mm
Process Host: XAWRK008

First Level Reviewer: williamsla Date: 20-Aug-2013 13:59:24

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.763	5.763	0.0	99	1666371	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.0	82	1340643	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.0	93	698313	10.0	
$ 6 Dibromofluoromethane (Surr)	113	5.194	5.194	0.0	60	320390	8.32	
$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.491	5.479	0.012	0	376498	8.10	
$ 8 Toluene-d8 (Surr)	98	7.151	7.151	0.0	92	1379759	7.93	
$ 9 4-Bromofluorobenzene (Surr)	95	9.594	9.582	0.012	97	491232	7.70	
14 Dichlorodifluoromethane	85		1.648					
15 Chloromethane	50		1.826					
17 Vinyl chloride	62	1.957	1.957	0.0	85	60310	1.08	
18 Bromomethane	94		2.312					
19 Chloroethane	64		2.419					
21 Trichlorofluoromethane	101		2.668					
25 1,1-Dichloroethene	96		3.178					9
26 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.190					
27 Acetone	43	3.238	3.237	0.001	88	21924	0.2505	
29 Carbon disulfide	76		3.392					
33 Methylene Chloride	84		3.641					
34 2-Methyl-2-propanol	59	3.736	3.736	0.0	25	1006	0.2783	
35 Methyl tert-butyl ether	73		3.878					9
37 trans-1,2-Dichloroethene	96		3.890					9
39 1,1-Dichloroethane	63		4.269					
41 Isopropyl ether	87		4.305					
40 Vinyl acetate	86		4.305					
43 Tert-butyl ethyl ether	59		4.625					9
45 cis-1,2-Dichloroethene	96	4.779	4.779	0.0	66	175226	3.41	
44 2,2-Dichloropropane	77		4.779					
46 2-Butanone (MEK)	43		4.779					
50 Chlorobromomethane	128		4.993					
52 Chloroform	83		5.052					

Report Date: 20-Aug-2013 14:08:07 Chrom Revision: 2.0 01-Apr-2013 21:16:10
Data File: \\NCCHROM\ChromData\A3UX17\20130819-22644.b\UXR7058.D

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
53 1,1,1-Trichloroethane	97		5.206					
56 1,1-Dichloropropene	75		5.348					9
55 Carbon tetrachloride	117		5.348					
58 Benzene	78	5.538	5.538	0.0	76	41023	0.2074	
59 1,2-Dichloroethane	62		5.550					
60 Tert-amyl methyl ether	73		5.609					
63 Trichloroethene	130	6.084	6.083	0.001	92	243960	4.87	
66 1,2-Dichloropropane	63		6.285					
69 Dibromomethane	93		6.392					
70 Dichlorobromomethane	83		6.522					
72 2-Chloroethyl vinyl ether	63		6.759					
73 cis-1,3-Dichloropropene	75		6.902					
74 4-Methyl-2-pentanone (MIBK)	43		7.032					
75 Toluene	91	7.210	7.210	0.0	82	56356	0.2767	
76 trans-1,3-Dichloropropene	75		7.400					
79 Tetrachloroethene	164		7.696					
81 1,3-Dichloropropane	76		7.732					
82 2-Hexanone	43		7.779					
84 Chlorodibromomethane	129		7.945					
85 Ethylene Dibromide	107		8.052					
87 Chlorobenzene	112		8.503					9
88 1,1,1,2-Tetrachloroethane	131		8.574					
89 Ethylbenzene	106		8.586					9
90 m-Xylene & p-Xylene	106	8.704	8.692	0.012	79	10715	0.1209	
91 o-Xylene	106	9.084	9.084	0.0	39	5199	0.0628	7
92 Styrene	104		9.096					
93 Bromoform	173		9.297					
95 Isopropylbenzene	105		9.428					
97 1,1,2,2-Tetrachloroethane	83		9.724					
98 Bromobenzene	156		9.748					
100 1,2,3-Trichloropropane	110		9.771					
101 N-Propylbenzene	120		9.831					9
102 2-Chlorotoluene	126		9.926					
104 4-Chlorotoluene	126		10.032					
105 tert-Butylbenzene	119		10.317					9
106 1,2,4-Trimethylbenzene	105		10.364					9
107 sec-Butylbenzene	105		10.530					
108 1,3-Dichlorobenzene	146		10.661					9
109 4-Isopropyltoluene	119		10.673					
110 1,4-Dichlorobenzene	146		10.744					9
111 1,2,3-Trimethylbenzene	105		10.791					9
112 n-Butylbenzene	91		11.076					
113 1,2-Dichlorobenzene	146		11.123					
114 1,2-Dibromo-3-Chloropropane	157		11.906					
116 1,2,4-Trichlorobenzene	180		12.724					
117 Hexachlorobutadiene	225		12.890					
118 Naphthalene	128		12.997					9
119 1,2,3-Trichlorobenzene	180		13.258					
S 124 Xylenes, Total	106				0		0.1836	

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: CCVIS 240-98083/2 Calibration Date: 08/20/2013 01:45

Instrument ID: A3UX17 Calib Start Date: 08/17/2013 15:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/17/2013 17:48

Lab File ID: UXR7044.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	0.2884	0.2523		1.00	0.0100	-12.5	50.0
Chloromethane	Ave	0.3681	0.3713	0.1000	1.00	0.0100	0.9	50.0
Vinyl chloride	Ave	0.3340	0.3358		1.00	0.0100	0.5	20.0
Bromomethane	Qua		0.1318		1.00	0.0100	15.6	50.0
Chloroethane	Ave	0.0993	0.1237		1.00	0.0100	24.6	50.0
Trichlorofluoromethane	Ave	0.2327	0.2377		1.00	0.0100	2.1	50.0
Acrolein	Ave	0.0353	0.0283		20.0	0.100	-19.8	50.0
1,1-Dichloroethene	Ave	0.2706	0.2670		1.00	0.0100	-1.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2116	0.2059		1.00	0.0100	-2.7	50.0
Acetone	Lin1		0.0776		10.0	0.0200	-9.3	50.0
Iodomethane	Ave	0.3777	0.4458		1.00	0.0100	18.0	50.0
Carbon disulfide	Ave	0.7404	0.7347		1.00	0.0100	-0.8	50.0
Acetonitrile	Ave	0.0366	0.0342		20.0	0.100	-6.7	50.0
Methyl acetate	Ave	0.2245	0.2132		10.0	0.0200	-5.1	50.0
Methylene Chloride	Lin1		0.3335		1.00	0.0100	7.4	50.0
tert-Butyl alcohol	Ave	0.0217	0.0180		50.0	0.200	-16.9	50.0
Acrylonitrile	Ave	0.1133	0.1053		20.0	0.0200	-7.1	50.0
Methyl tert-butyl ether	Ave	0.7461	0.7350		1.00	0.0100	-1.5	50.0
trans-1,2-Dichloroethene	Ave	0.2924	0.2971		1.00	0.0100	1.6	50.0
Hexane	Ave	0.0800	0.0701		1.00	0.0100	-12.4	20.0
1,1-Dichloroethane	Ave	0.4956	0.4955	0.1000	1.00	0.0100	-0.0	50.0
Vinyl acetate	Ave	0.0394	0.0265		2.00	0.0100	-32.8	50.0
2,2-Dichloropropane	Ave	0.2628	0.2357		1.00	0.0100	-10.3	50.0
2-Butanone	Ave	0.1234	0.1132		10.0	0.0200	-8.3	50.0
cis-1,2-Dichloroethene	Ave	0.3079	0.3172		1.00	0.0100	3.0	50.0
Bromochloromethane	Ave	0.1447	0.1503		1.00	0.0100	3.8	50.0
Tetrahydrofuran	Lin1		0.0781		5.00	0.0100	-0.3	50.0
Chloroform	Ave	0.4491	0.4557		1.00	0.0100	1.5	20.0
1,1,1-Trichloroethane	Ave	0.3501	0.3446		1.00	0.0100	-1.6	50.0
Cyclohexane	Ave	0.5833	0.5064		1.00	0.0100	-13.2	50.0
1,1-Dichloropropene	Ave	0.3641	0.3579		1.00	0.0100	-1.7	50.0
Carbon tetrachloride	Ave	0.3098	0.2986		1.00	0.0100	-3.6	50.0
Benzene	Ave	1.187	1.168		1.00	0.0100	-1.6	50.0
1,2-Dichloroethane	Ave	0.3411	0.3531		1.00	0.0100	3.5	50.0
Trichloroethene	Ave	0.3009	0.2995		1.00	0.0100	-0.5	50.0
Methylcyclohexane	Ave	0.5046	0.4440		1.00	0.0100	-12.0	50.0
1,2-Dichloropropane	Ave	0.2812	0.2838		1.00	0.0100	0.9	20.0
1,4-Dioxane	Ave	0.0028	0.0027		50.0	0.500	-4.6	50.0
Dibromomethane	Ave	0.1440	0.1489		1.00	0.0100	3.3	50.0
Bromodichloromethane	Ave	0.3100	0.3033		1.00	0.0100	-2.2	50.0

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **September 22, 2013**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- DISSOLVED METALS AND HARDNESS**
LOCKHEED-MARTIN STATE AIRPORT (MSA)
SDG 240-28011-1

SAMPLES: 36/Aqueous/

MSA-SW37A-081513	MSA-SW37B-081513
MSA-SW37C-081513	MSA-SW37D-081513
MSA-SW38A-081513	MSA-SW38B-081513
MSA-SW38C-081513	MSA-SW38D-081513
MSA-SW39A-081513	MSA-SW39B-081513
MSA-SW39C-081513	MSA-SW39D-081513
MSA-SW40A-081513	MSA-SW40B-081513
MSA-SW40C-081513	MSA-SW40D-081513
MSA-SW41A-081513	MSA-SW41B-081513
MSA-SW41C-081513	MSA-SW41D-081513
MSA-SW42A-081513	MSA-SW42B-081513
MSA-SW42C-081513	MSA-SW42D-081513
MSA-SW43A-081513	MSA-SW43B-081513
MSA-SW43C-081513	MSA-SW43D-081513
MSA-SW44A-081513	MSA-SW44B-081513
MSA-SW44C-081513	MSA-SW44D-081513
MSA-SW45A-081513	MSA-SW45B-081513
MSA-SW45C-081513	MSA-SW45D-081513

Overview

The sample set for Lockheed MSA, SDG 240-28011-1, consists of thirty sixty (36) aqueous environmental sample. This SDG contained no field duplicate pairs.

All samples were analyzed for dissolved metals and hardness. The samples were collected by Tetra Tech August 15th, 2013 and analyzed by TestAmerica. Metals analyses were conducted using method 6020. Mercury analyses were conducted using method 7470A. Hardness analyses were conducted using standard method 2340B.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, 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 following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Barium [1]	0.52 ug/L	2.6 ug/L
Chromium [1]	0.18 ug/L	0.9 ug/L
Copper [1]	0.92 ug/L	4.6 ug/L
Nickel [1]	0.096 ug/L	0.48 ug/L
Vanadium [1]	0.23 ug/L	1.15 ug/L
Zinc [1]	6.4 ug/L	32 ug/L
Copper [2]	1.8 ug/L	9.0 ug/L
Vanadium [2]	0.24 ug/L	1.2 ug/L
Arsenic [3]	0.16 ug/L	0.8 ug/L
Copper [3]	1.24 ug/L	6.2 ug/L
Vanadium [3]	0.61 ug/L	3.0 ug/L
Antimony [4]	0.24 ug/L	1.2 ug/L
Arsenic [4]	0.14 ug/L	0.7 ug/L
Beryllium [4]	0.29 ug/L	1.4 ug/L
Cadmium [4]	0.085 ug/L	0.42 ug/L
Cobalt [4]	0.10 ug/L	0.50 ug/L
Nickel [4]	0.094 ug/L	0.47 ug/L
Silver [4]	0.056 ug/L	0.28 ug/L
Tungsten [4]	0.24 ug/L	1.2 ug/L
Zinc [4]	3.0 ug/L	15 ug/L

[1] Maximum concentration found in preparation blank affecting samples in preparation batch 97949.
[2] Maximum concentration found in preparation blank affecting samples in preparation batch 97953.
[3] Maximum concentration found in preparation blank affecting samples in preparation batch 98027.
[4] Maximum concentration found in a calibration blank.

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. Detected results less than the blank action level were qualified (B) for blank contamination.

Notes

Non-detected results were reported at the MDL.

The CRDL standard analyzed on 8/20/13 had a percent recovery > 110% for copper. No validation action was warranted as sample results were either > 2X CRDL or qualified for blank contamination.

Sample MSA-SW42D-081513 had a percent recovery < 60% for internal standard Li-6. No validation action was taken as the beryllium results for sample MSA-SW42D-081513 was qualified for blank contamination.

Executive Summary

Laboratory Performance: Preparation and calibration blank contamination resulted in the qualification of sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Tetra Tech
Megan Carson
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 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04793	NSAMPLE	MSA-SW37A-081513			MSA-SW37B-081513			MSA-SW37C-081513			MSA-SW37D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-1			240-28011-2			240-28011-3			240-28011-4		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.34	B	A	0.35	B	A	0.36	B	A	0.36	B	A
ARSENIC		1.7	J	P	1.8	J	P	1.9	J	P	1.9	J	P
BARIUM		16			15			17			16		
BERYLLIUM		0.13	B	A	0.087	B	A	0.079	B	A	0.068	B	A
CADMIUM		0.037	B	A	0.026	U		0.026	U		0.026	U	
CHROMIUM		0.24	J	P	0.23	J	P	0.34	J	P	0.4	J	P
COBALT		0.12	B	A	0.078	B	A	0.079	B	A	0.067	B	A
COPPER		4.2	B	A	3.9	B	A	4.5	B	A	4.7	B	A
LEAD		0.2	J	P	0.17	J	P	0.17	J	P	0.14	J	P
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.5	J	P	1.5	J	P	1.6	J	P	1.6	J	P
NICKEL		1.6	J	P	1.3	J	P	1.5	J	P	1.4	J	P
SELENIUM		0.47	J	P	0.34	U		0.49	J	P	0.4	J	P
SILVER		0.01	B	A	0.01	B	A	0.011	B	A	0.009	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.1	B	A	0.1	B	A	0.12	B	A	0.11	B	A
VANADIUM		1.6	J	P	1.8	J	P	2.1	J	P	2	J	P
ZINC		8	B	A	2.1	U		2.5	B	A	3.1	B	A

PROJ_NO: 04793	NSAMPLE	MSA-SW38A-081513			MSA-SW38B-081513			MSA-SW38C-081513			MSA-SW38D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-5			240-28011-6			240-28011-7			240-28011-8		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.36	B	A	0.35	B	A	0.36	B	A	0.32	B	A
ARSENIC		1.8	J	P	1.8	J	P	1.8	J	P	1.8	J	P
BARIUM		15			16			16			16		
BERYLLIUM		0.06	B	A	0.058	B	A	0.074	B	A	0.064	B	A
CADMIUM		0.029	B	A	0.032	B	A	0.043	B	A	0.05	B	A
CHROMIUM		0.26	J	P	0.85	J	P	0.3	J	P	0.2	J	P
COBALT		0.088	B	A	0.078	B	A	0.1	B	A	0.073	B	A
COPPER		4	B	A	4.3	B	A	4.3	B	A	4.4	B	A
LEAD		0.14	U		0.14	U		0.19	J	P	0.14	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.5	J	P	1.6	J	P	1.6	J	P	1.6	J	P
NICKEL		1.3	J	P	1.6	J	P	1.4	J	P	1.4	J	P
SELENIUM		0.34	U		0.61	J	P	0.34	U		0.36	J	P
SILVER		0.011	B	A	0.01	B	A	0.017	B	A	0.009	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.089	B	A	0.093	B	A	0.12	B	A	0.11	B	A
VANADIUM		1.9	J	P	1.9	J	P	1.9	J	P	2	J	P
ZINC		3.1	B	A	2.6	B	A	5.1	B	A	3.4	B	A

PROJ_NO: 04793	NSAMPLE	MSA-SW39A-081513			MSA-SW39B-081513			MSA-SW39C-081513			MSA-SW39D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-9			240-28011-10			240-28011-11			240-28011-12		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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	B	A	0.29	B	A	0.3	B	A	0.32	B	A
ARSENIC		1.5	J	P	1.4	J	P	1.6	J	P	1.7	J	P
BARIUM		17			16			16			19		
BERYLLIUM		0.031	U		0.034	B	A	0.031	U		0.031	B	A
CADMIUM		0.029	B	A	0.026	U		0.041	B	A	0.039	B	A
CHROMIUM		0.22	J	P	0.27	J	P	0.22	J	P	0.21	J	P
COBALT		0.11	B	A	0.1	B	A	0.068	B	A	0.08	B	A
COPPER		3.8	B	A	3.8	B	A	4	B	A	4.4	B	A
LEAD		0.19	J	P	0.19	J	P	0.14	U		0.14	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.4	J	P	1.4	J	P	1.6	J	P	1.7	J	P
NICKEL		1.3	J	P	1.3	J	P	1.6	J	P	1.5	J	P
SELENIUM		0.34	J	P	0.34	U		0.44	J	P	0.44	J	P
SILVER		0.01	B	A	0.0083	U		0.0083	U		0.012	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.083	B	A	0.079	B	A	0.081	B	A	0.097	B	A
VANADIUM		1.9	J	P	1.9	J	P	1.9	J	P	2.1	J	P
ZINC		2.1	U		2.1	B	A	7.6	B	A	2.1	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW40A-081513			MSA-SW40B-081513			MSA-SW40C-081513			MSA-SW40D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-13			240-28011-14			240-28011-15			240-28011-16		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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	B	A	0.58	B	A	0.37	B	A	0.35	B	A
ARSENIC		1.7	J	P	2.1	J	P	1.7	J	P	1.8	J	P
BARIUM		15			16			15			16		
BERYLLIUM		0.092	B	A	0.47	B	A	0.2	B	A	0.15	B	A
CADMIUM		0.048	B	A	0.46	J	P	0.066	B	A	0.03	B	A
CHROMIUM		0.19	B	A	0.76	B	A	0.21	B	A	0.2	B	A
COBALT		0.1	B	A	0.53	J	P	0.11	B	A	0.081	B	A
COPPER		4	B	A	4.4	B	A	4	B	A	4.4	B	A
LEAD		0.19	J	P	0.77	J	P	0.21	J	P	0.16	J	P
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.5	J	P	1.6	J	P	1.6	J	P	1.6	J	P
NICKEL		1.3	J	P	1.8	J	P	1.4	J	P	1.5	J	P
SELENIUM		0.35	J	P	1.1	J	P	0.34	U		0.51	J	P
SILVER		0.018	B	A	0.058	B	A	0.014	B	A	0.014	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.15	B	A	0.35	B	A	0.15	B	A	0.12	B	A
VANADIUM		1.6	J	P	2.1	J	P	1.8	J	P	2	J	P
ZINC		2.1	U		3.7	B	A	2.1	U		2.1	U	

PROJ_NO: 04793	NSAMPLE	MSA-SW41A-081513			MSA-SW41B-081513			MSA-SW41C-081513			MSA-SW41D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-17			240-28011-18			240-28011-19			240-28011-20		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.33	B	A	0.34	B	A	0.3	B	A	0.31	B	A
ARSENIC		1.8	J	P	1.6	J	P	1.5	J	P	1.5	J	P
BARIUM		15			16			16			16		
BERYLLIUM		0.13	B	A	0.085	B	A	0.092	B	A	0.057	B	A
CADMIUM		0.044	B	A	0.037	B	A	0.032	B	A	0.026	B	PA
CHROMIUM		0.36	B	A	0.18	B	A	0.22	B	A	0.23	B	A
COBALT		0.16	B	A	0.073	B	A	0.061	B	A	0.061	B	A
COPPER		4.8			4	B	A	4.1	B	A	4.1	B	A
LEAD		0.2	J	P	0.14	U		0.14	U		0.14	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.6	J	P	1.6	J	P	1.5	J	P	1.5	J	P
NICKEL		1.5	J	P	1.6	J	P	1.3	J	P	1.4	J	P
SELENIUM		0.48	J	P	0.34	U		0.37	J	P	0.36	J	P
SILVER		0.012	B	A	0.011	B	A	0.013	B	A	0.016	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.1	B	A	0.11	B	A	0.089	B	A	0.088	B	A
VANADIUM		2	J	P	1.9	J	P	1.9	J	P	1.8	J	P
ZINC		3.7	B	A	3.2	B	A	8.9	B	A	3	B	A

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PROJ_NO: 04793	NSAMPLE	MSA-SW42A-081513			MSA-SW42B-081513			MSA-SW42C-081513			MSA-SW42D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-21			240-28011-22			240-28011-23			240-28011-24		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.32	B	A	0.31	B	A	0.33	B	A	0.3	B	A
ARSENIC		1.7	J	P	1.7	J	P	1.8	J	P	1.8	J	P
BARIUM		15			15			15			15		
BERYLLIUM		0.07	B	A	0.048	B	A	0.058	B	A	0.051	B	A
CADMIUM		0.026	U		0.026	U		0.026	U		0.026	U	
CHROMIUM		0.22	B	A	0.19	B	A	0.19	B	A	0.19	B	A
COBALT		0.1	B	A	0.067	B	A	0.056	B	A	0.067	B	A
COPPER		4.2	B	A	5.1			32			4.4	B	A
LEAD		0.14	U		0.14	U		0.14	U		0.14	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.5	J	P	1.5	J	P	1.5	J	P	1.5	J	P
NICKEL		1.2	J	P	1.2	J	P	1.3	J	P	1.6	J	P
SELENIUM		0.34	U		0.34	U		0.34	U		0.34	U	
SILVER		0.009	B	A	0.012	B	A	0.029	B	A	0.011	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.096	B	A	0.083	B	A	0.085	B	A	0.11	B	A
VANADIUM		1.8	J	P	1.9	J	P	2	J	P	2.1	J	P
ZINC		2.1	U		6.1	B	A	24	B	A	4.2	B	A

PROJ_NO: 04793	NSAMPLE	MSA-SW43A-081513			MSA-SW43B-081513			MSA-SW43C-081513			MSA-SW43D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-25			240-28011-26			240-28011-27			240-28011-28		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.33	B	A	0.33	B	A	0.31	B	A	0.31	B	A
ARSENIC		1.8	J	P	1.8	J	P	1.6	J	P	1.6	J	P
BARIUM		16			17			16			17		
BERYLLIUM		0.039	B	A	0.037	B	A	0.031	U		0.031	U	
CADMIUM		0.05	B	A	0.031	B	A	0.026	U		0.031	B	A
CHROMIUM		0.25	B	A	0.33	B	A	0.19	B	A	0.2	B	A
COBALT		0.12	B	A	0.13	B	A	0.061	B	A	0.077	B	A
COPPER		4.6			4.6			4.2	B	A	4.2	B	A
LEAD		0.14	U		0.26	J	P	0.14	U		0.14	U	
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.6	J	P	1.6	J	P	1.5	J	P	1.6	J	P
NICKEL		1.4	J	P	1.7	J	P	1.2	J	P	1.5	J	P
SELENIUM		0.34	U		0.41	J	P	0.34	U		0.43	J	P
SILVER		0.011	B	A	0.011	B	A	0.009	B	A	0.0083	U	
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.11	B	A	0.077	B	A	0.075	B	A	0.069	B	A
VANADIUM		2	J	P	2.1	J	P	1.9	J	P	2.1	J	P
ZINC		17	B	A	4.2	B	A	6.9	B	A	2.1	B	A

PROJ_NO: 04793	NSAMPLE	MSA-SW44A-081513			MSA-SW44B-081513			MSA-SW44C-081513			MSA-SW44D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-29			240-28011-30			240-28011-31			240-28011-32		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.3	B	A	0.31	B	A	0.3	B	A	0.53	B	A
ARSENIC		1.6	J	P	1.5	J	P	1.6	J	P	2	J	P
BARIUM		16			16			16			19		
BERYLLIUM		0.031	U		0.031	U		0.043	B	A	0.34	B	A
CADMIUM		0.034	B	A	0.039	B	A	0.027	B	A	0.47	J	P
CHROMIUM		0.2	B	A	0.2	B	A	0.19	B	A	0.75	J	P
COBALT		0.2	B	A	0.073	B	A	0.061	B	A	0.54	J	P
COPPER		4.2	B	A	4.1	B	A	3.8	B	A	4.8	B	A
LEAD		0.14	U		0.14	U		0.14	U		0.75	J	P
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		1.6	J	P	1.5	J	P	1.6	J	P	1.8	J	P
NICKEL		1.6	J	P	1.3	J	P	1.2	J	P	1.9	J	P
SELENIUM		0.38	J	P	0.34	U		0.43	J	P	0.94	J	P
SILVER		0.0083	U		0.014	B	A	0.009	B	A	0.045	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.075	B	A	0.12	B	A	0.085	B	A	0.36	B	A
VANADIUM		2	J	P	1.9	J	P	2	J	P	2.4	B	A
ZINC		2.8	B	A	3.5	B	A	2.1	U		2.5	B	A

PROJ_NO: 04793	NSAMPLE	MSA-SW45A-081513			MSA-SW45B-081513			MSA-SW45C-081513			MSA-SW45D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-33			240-28011-34			240-28011-35			240-28011-36		
FRACTION: MF	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		0.56	B	A	0.32	B	A	0.28	B	A	0.28	B	A
ARSENIC		1.9	J	P	1.4	J	P	1.4	J	P	1.4	J	P
BARIUM		17			17			17			17		
BERYLLIUM		0.38	B	A	0.23	B	A	0.13	B	A	0.1	B	A
CADMIUM		0.3	B	A	0.042	B	A	0.037	B	A	0.033	B	A
CHROMIUM		0.48	J	P	0.55	J	P	0.23	J	P	0.2	J	P
COBALT		0.4	B	A	0.085	B	A	0.16	B	A	0.13	B	A
COPPER		5	B	A	4.4	B	A	4	B	A	3.9	B	A
LEAD		0.6	J	P	0.16	J	P	0.17	J	P	0.14	U	
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	1.5	J	P
NICKEL		1.9	J	P	1.6	J	P	3.3			3.1		
SELENIUM		0.91	J	P	0.38	J	P	0.47	J	P	0.49	J	P
SILVER		0.035	B	A	0.025	B	A	0.01	B	A	0.01	B	A
THALLIUM		0.4	U		0.4	U		0.4	U		0.4	U	
TUNGSTEN		0.33	B	A	0.11	B	A	0.092	B	A	0.084	B	A
VANADIUM		2.1	B	A	1.7	B	A	1.8	B	A	1.9	B	A
ZINC		3.4	B	A	6.7	B	A	4.9	B	A	3.6	B	A

PROJ_NO: 04793	NSAMPLE	MSA-SW37A-081513			MSA-SW37B-081513			MSA-SW37C-081513			MSA-SW37D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-1			240-28011-2			240-28011-3			240-28011-4		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		68			70			76			73		
HARDNESS AS CACO3		250			250			280			260		
MAGNESIUM HARDNESS AS CACO3		180			180			200			190		

PROJ_NO: 04793	NSAMPLE	MSA-SW38A-081513			MSA-SW38B-081513			MSA-SW38C-081513			MSA-SW38D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-5			240-28011-6			240-28011-7			240-28011-8		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		70			70			73			73		
HARDNESS AS CACO3		250			250			260			270		
MAGNESIUM HARDNESS AS CACO3		180			180			190			190		

PROJ_NO: 04793	NSAMPLE	MSA-SW39A-081513			MSA-SW39B-081513			MSA-SW39C-081513			MSA-SW39D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-9			240-28011-10			240-28011-11			240-28011-12		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		70			68			72			80		
HARDNESS AS CACO3		270			250			270			290		
MAGNESIUM HARDNESS AS CACO3		200			180			190			220		

PROJ_NO: 04793	NSAMPLE	MSA-SW40A-081513			MSA-SW40B-081513			MSA-SW40C-081513			MSA-SW40D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-13			240-28011-14			240-28011-15			240-28011-16		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		68			70			70			71		
HARDNESS AS CACO3		250			250			250			260		
MAGNESIUM HARDNESS AS CACO3		180			180			180			190		

PROJ_NO: 04793	NSAMPLE	MSA-SW41A-081513			MSA-SW41B-081513			MSA-SW41C-081513			MSA-SW41D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-17			240-28011-18			240-28011-19			240-28011-20		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		70			72			71			71		
HARDNESS AS CACO3		250			260			260			260		
MAGNESIUM HARDNESS AS CACO3		180			190			190			190		

PROJ_NO: 04793	NSAMPLE	MSA-SW42A-081513			MSA-SW42B-081513			MSA-SW42C-081513			MSA-SW42D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-21			240-28011-22			240-28011-23			240-28011-24		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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			67			70			70		
HARDNESS AS CACO3		240			240			250			250		
MAGNESIUM HARDNESS AS CACO3		170			180			180			180		

PROJ_NO: 04793	NSAMPLE	MSA-SW43A-081513			MSA-SW43B-081513			MSA-SW43C-081513			MSA-SW43D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-25			240-28011-26			240-28011-27			240-28011-28		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		72			73			70			75		
HARDNESS AS CACO3		260			270			260			280		
MAGNESIUM HARDNESS AS CACO3		190			190			190			200		

PROJ_NO: 04793	NSAMPLE	MSA-SW44A-081513			MSA-SW44B-081513			MSA-SW44C-081513			MSA-SW44D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-29			240-28011-30			240-28011-31			240-28011-32		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		72			72			71			80		
HARDNESS AS CACO3		260			260			260			300		
MAGNESIUM HARDNESS AS CACO3		190			190			190			220		

PROJ_NO: 04793	NSAMPLE	MSA-SW45A-081513			MSA-SW45B-081513			MSA-SW45C-081513			MSA-SW45D-081513		
SDG: 240-28011-1	LAB_ID	240-28011-33			240-28011-34			240-28011-35			240-28011-36		
FRACTION: MISC	SAMP_DATE	8/15/2013			8/15/2013			8/15/2013			8/15/2013		
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		71			72			73			74		
HARDNESS AS CACO3		260			270			270			270		
MAGNESIUM HARDNESS AS CACO3		190			190			200			200		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW37A-081513**

Lab Sample ID: 240-28011-1
Client Matrix: Water

Date Sampled: 08/15/2013 1227
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	058SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1448			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.34	J	0.11	2.0
Arsenic	1.7	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	0.13	J	0.031	1.0
Cadmium	0.037	J	0.026	1.0
Chromium	0.24	J	0.13	2.0
Cobalt	0.12	J	0.020	1.0
Copper	4.2	B	0.24	2.0
Lead	0.20	J	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.6	J	0.088	2.0
Selenium	0.47	J	0.34	5.0
Silver	0.010	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.6	J B	0.15	5.0
Zinc	8.0	J	2.1	20
Tungsten	0.10	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1113			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	68		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW37B-081513**

Lab Sample ID: 240-28011-2
Client Matrix: Water

Date Sampled: 08/15/2013 1232
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	059SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1452			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.35	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	15		0.32	5.0
Beryllium	0.087	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.23	J	0.13	2.0
Cobalt	0.078	J	0.020	1.0
Copper	3.9	B	0.24	2.0
Lead	0.17	J	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.3	J	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.010	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.8	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.10	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1115			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW37C-081513**

Lab Sample ID: 240-28011-3
Client Matrix: Water

Date Sampled: 08/15/2013 1237
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	060SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1456			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.36	J	0.11	2.0
Arsenic	1.9	J B	0.063	5.0
Barium	17		0.32	5.0
Beryllium	0.079	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.34	J	0.13	2.0
Cobalt	0.079	J	0.020	1.0
Copper	4.5	B	0.24	2.0
Lead	0.17	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.5	J	0.088	2.0
Selenium	0.49	J	0.34	5.0
Silver	0.011	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	2.5	J	2.1	20
Tungsten	0.12	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1117			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	280		33	33
Calcium hardness as calcium carbonate	76		12	12
Magnesium hardness as calcium carbonate	200		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW37D-081513**

Lab Sample ID: 240-28011-4
Client Matrix: Water

Date Sampled: 08/15/2013 1243
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	061SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1500			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.36	J	0.11	2.0
Arsenic	1.9	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	0.068	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.40	J	0.13	2.0
Cobalt	0.067	J	0.020	1.0
Copper	4.7	B	0.24	2.0
Lead	0.14	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.4	J	0.088	2.0
Selenium	0.40	J	0.34	5.0
Silver	0.0090	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	3.1	J	2.1	20
Tungsten	0.11	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1118			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	73		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW38A-081513**

Lab Sample ID: 240-28011-5
Client Matrix: Water

Date Sampled: 08/15/2013 1126
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	062SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1504			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.36	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	15		0.32	5.0
Beryllium	0.060	J	0.031	1.0
Cadmium	0.029	J	0.026	1.0
Chromium	0.26	J	0.13	2.0
Cobalt	0.088	J	0.020	1.0
Copper	4.0	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.3	J	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.011	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	3.1	J	2.1	20
Tungsten	0.089	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1121			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW38B-081513**

Lab Sample ID: 240-28011-6
Client Matrix: Water

Date Sampled: 08/15/2013 1131
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	063SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1508			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.35	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	0.058	J	0.031	1.0
Cadmium	0.032	J	0.026	1.0
Chromium	0.85	J	0.13	2.0
Cobalt	0.078	J	0.020	1.0
Copper	4.3	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.6	J	0.088	2.0
Selenium	0.61	J	0.34	5.0
Silver	0.010	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	2.6	J	2.1	20
Tungsten	0.093	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1122			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW38C-081513**

Lab Sample ID: 240-28011-7
Client Matrix: Water

Date Sampled: 08/15/2013 1135
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	066SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1520			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.36	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	0.074	J	0.031	1.0
Cadmium	0.043	J	0.026	1.0
Chromium	0.30	J	0.13	2.0
Cobalt	0.10	J	0.020	1.0
Copper	4.3	B	0.24	2.0
Lead	0.19	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.4	J	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.017	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	5.1	J	2.1	20
Tungsten	0.12	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1123			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	73		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW38D-081513**

Lab Sample ID: 240-28011-8
Client Matrix: Water

Date Sampled: 08/15/2013 1140
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	067SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1524			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.32	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	0.064	J	0.031	1.0
Cadmium	0.050	J	0.026	1.0
Chromium	0.20	J	0.13	2.0
Cobalt	0.073	J	0.020	1.0
Copper	4.4	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.4	J	0.088	2.0
Selenium	0.36	J	0.34	5.0
Silver	0.0090	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	3.4	J	2.1	20
Tungsten	0.11	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1126			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	73		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW39A-081513**

Lab Sample ID: 240-28011-9
Client Matrix: Water

Date Sampled: 08/15/2013 0826
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	068SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1528			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.29	J	0.11	2.0
Arsenic	1.5	J B	0.063	5.0
Barium	17		0.32	5.0
Beryllium	1.0	U	0.031	1.0
Cadmium	0.029	J	0.026	1.0
Chromium	0.22	J	0.13	2.0
Cobalt	0.11	J	0.020	1.0
Copper	3.8	B	0.24	2.0
Lead	0.19	J	0.14	1.0
Molybdenum	1.4	J	0.81	10
Nickel	1.3	J	0.088	2.0
Selenium	0.34	J	0.34	5.0
Silver	0.010	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.083	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1131			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	200		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW39B-081513**

Lab Sample ID: 240-28011-10
Client Matrix: Water

Date Sampled: 08/15/2013 0833
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	069SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1532			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.29	J	0.11	2.0
Arsenic	1.4	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	0.034	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.27	J	0.13	2.0
Cobalt	0.10	J	0.020	1.0
Copper	3.8	B	0.24	2.0
Lead	0.19	J	0.14	1.0
Molybdenum	1.4	J	0.81	10
Nickel	1.3	J	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	1.0	U	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	2.1	J	2.1	20
Tungsten	0.079	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1132			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	68		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW39C-081513**

Lab Sample ID: 240-28011-11
Client Matrix: Water

Date Sampled: 08/15/2013 0838
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	070SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1536			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.30	J	0.11	2.0
Arsenic	1.6	J B	0.063	5.0
Barium	16		0.32	5.0
Beryllium	1.0	U	0.031	1.0
Cadmium	0.041	J	0.026	1.0
Chromium	0.22	J	0.13	2.0
Cobalt	0.068	J	0.020	1.0
Copper	4.0	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.6	J	0.088	2.0
Selenium	0.44	J	0.34	5.0
Silver	1.0	U	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	7.6	J	2.1	20
Tungsten	0.081	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1133			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	72		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW39D-081513**

Lab Sample ID: 240-28011-12
Client Matrix: Water

Date Sampled: 08/15/2013 0844
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97953	Lab File ID:	071SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1540			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0816				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.32	J	0.11	2.0
Arsenic	1.7	J B	0.063	5.0
Barium	19		0.32	5.0
Beryllium	0.031	J	0.031	1.0
Cadmium	0.039	J	0.026	1.0
Chromium	0.21	J	0.13	2.0
Cobalt	0.080	J	0.020	1.0
Copper	4.4	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.7	J	0.81	10
Nickel	1.5	J	0.088	2.0
Selenium	0.44	J	0.34	5.0
Silver	0.012	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.097	J B	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97957	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1135			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	290		33	33
Calcium hardness as calcium carbonate	80		12	12
Magnesium hardness as calcium carbonate	220		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW40A-081513**

Lab Sample ID: 240-28011-13
Client Matrix: Water

Date Sampled: 08/15/2013 1146
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	078SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1608			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.35	J	0.11	2.0
Arsenic	1.7	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.092	J	0.031	1.0
Cadmium	0.048	J	0.026	1.0
Chromium	0.19	J B	0.13	2.0
Cobalt	0.10	J	0.020	1.0
Copper	4.0	B	0.24	2.0
Lead	0.19	J	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.3	J B	0.088	2.0
Selenium	0.35	J	0.34	5.0
Silver	0.018	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.6	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.15	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1144			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	68		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW40B-081513**

Lab Sample ID: 240-28011-14
Client Matrix: Water

Date Sampled: 08/15/2013 1158
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	082SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1624			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.58	J	0.11	2.0
Arsenic	2.1	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.47	J	0.031	1.0
Cadmium	0.46	J	0.026	1.0
Chromium	0.76	J B	0.13	2.0
Cobalt	0.53	J	0.020	1.0
Copper	4.4	B	0.24	2.0
Lead	0.77	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.8	J B	0.088	2.0
Selenium	1.1	J	0.34	5.0
Silver	0.058	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	3.7	J B	2.1	20
Tungsten	0.35	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1151			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW40C-081513**

Lab Sample ID: 240-28011-15
Client Matrix: Water

Date Sampled: 08/15/2013 1202
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	083SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1628			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.37	J	0.11	2.0
Arsenic	1.7	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.20	J	0.031	1.0
Cadmium	0.066	J	0.026	1.0
Chromium	0.21	J B	0.13	2.0
Cobalt	0.11	J	0.020	1.0
Copper	4.0	B	0.24	2.0
Lead	0.21	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.4	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.014	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.8	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.15	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1152			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW40D-081513**

Lab Sample ID: 240-28011-16
Client Matrix: Water

Date Sampled: 08/15/2013 1206
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	084SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1632			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.35	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.15	J	0.031	1.0
Cadmium	0.030	J	0.026	1.0
Chromium	0.20	J B	0.13	2.0
Cobalt	0.081	J	0.020	1.0
Copper	4.4	B	0.24	2.0
Lead	0.16	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.5	J B	0.088	2.0
Selenium	0.51	J	0.34	5.0
Silver	0.014	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.12	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1154			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	71		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW41A-081513**

Lab Sample ID: 240-28011-17
Client Matrix: Water

Date Sampled: 08/15/2013 1009
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	085SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1636			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.33	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.13	J	0.031	1.0
Cadmium	0.044	J	0.026	1.0
Chromium	0.36	J B	0.13	2.0
Cobalt	0.16	J	0.020	1.0
Copper	4.8	B	0.24	2.0
Lead	0.20	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.5	J B	0.088	2.0
Selenium	0.48	J	0.34	5.0
Silver	0.012	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	3.7	J B	2.1	20
Tungsten	0.10	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1156			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW41B-081513**

Lab Sample ID: 240-28011-18
Client Matrix: Water

Date Sampled: 08/15/2013 1015
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	086SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1640			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.34	J	0.11	2.0
Arsenic	1.6	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.085	J	0.031	1.0
Cadmium	0.037	J	0.026	1.0
Chromium	0.18	J B	0.13	2.0
Cobalt	0.073	J	0.020	1.0
Copper	4.0	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.6	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.011	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	3.2	J B	2.1	20
Tungsten	0.11	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1157			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	72		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW41C-081513**

Lab Sample ID: 240-28011-19
Client Matrix: Water

Date Sampled: 08/15/2013 1019
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	087SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1644			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.30	J	0.11	2.0
Arsenic	1.5	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.092	J	0.031	1.0
Cadmium	0.032	J	0.026	1.0
Chromium	0.22	J B	0.13	2.0
Cobalt	0.061	J	0.020	1.0
Copper	4.1	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.3	J B	0.088	2.0
Selenium	0.37	J	0.34	5.0
Silver	0.013	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	8.9	J B	2.1	20
Tungsten	0.089	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1159			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	71		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW41D-081513**

Lab Sample ID: 240-28011-20
Client Matrix: Water

Date Sampled: 08/15/2013 1028
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	090SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1656			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.31	J	0.11	2.0
Arsenic	1.5	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.057	J	0.031	1.0
Cadmium	0.026	J	0.026	1.0
Chromium	0.23	J B	0.13	2.0
Cobalt	0.061	J	0.020	1.0
Copper	4.1	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.4	J B	0.088	2.0
Selenium	0.36	J	0.34	5.0
Silver	0.016	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.8	J B	0.15	5.0
Zinc	3.0	J B	2.1	20
Tungsten	0.088	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1200			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	71		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW42A-081513**

Lab Sample ID: 240-28011-21
Client Matrix: Water

Date Sampled: 08/15/2013 1209
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	091SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1700			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.32	J	0.11	2.0
Arsenic	1.7	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.070	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.22	J B	0.13	2.0
Cobalt	0.10	J	0.020	1.0
Copper	4.2	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.2	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.0090	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.8	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.096	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1201			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	240		33	33
Calcium hardness as calcium carbonate	66		12	12
Magnesium hardness as calcium carbonate	170		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW42B-081513**

Lab Sample ID: 240-28011-22
Client Matrix: Water

Date Sampled: 08/15/2013 1213
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	092SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1704			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.31	J	0.11	2.0
Arsenic	1.7	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.048	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.19	J B	0.13	2.0
Cobalt	0.067	J	0.020	1.0
Copper	5.1	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.2	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.012	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	6.1	J B	2.1	20
Tungsten	0.083	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1203			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	240		33	33
Calcium hardness as calcium carbonate	67		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW42C-081513**

Lab Sample ID: 240-28011-23
Client Matrix: Water

Date Sampled: 08/15/2013 1217
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	093SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1708			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.33	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.058	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.19	J B	0.13	2.0
Cobalt	0.056	J	0.020	1.0
Copper	32	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.3	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.029	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	24	B	2.1	20
Tungsten	0.085	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1208			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW42D-081513**

Lab Sample ID: 240-28011-24
Client Matrix: Water

Date Sampled: 08/15/2013 1222
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	094SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1712			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.30	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	15	B	0.32	5.0
Beryllium	0.051	J	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.19	J B	0.13	2.0
Cobalt	0.067	J	0.020	1.0
Copper	4.4	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.6	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.011	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	4.2	J B	2.1	20
Tungsten	0.11	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1209			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	250		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	180		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW43A-081513**

Lab Sample ID: 240-28011-25
Client Matrix: Water

Date Sampled: 08/15/2013 0947
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	095SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1716			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.33	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.039	J	0.031	1.0
Cadmium	0.050	J	0.026	1.0
Chromium	0.25	J B	0.13	2.0
Cobalt	0.12	J	0.020	1.0
Copper	4.6	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.4	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.011	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	17	J B	2.1	20
Tungsten	0.11	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1211			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	72		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW43B-081513**

Lab Sample ID: 240-28011-26
Client Matrix: Water

Date Sampled: 08/15/2013 0953
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	096SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1720			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.33	J	0.11	2.0
Arsenic	1.8	J B	0.063	5.0
Barium	17	B	0.32	5.0
Beryllium	0.037	J	0.031	1.0
Cadmium	0.031	J	0.026	1.0
Chromium	0.33	J B	0.13	2.0
Cobalt	0.13	J	0.020	1.0
Copper	4.6	B	0.24	2.0
Lead	0.26	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.7	J B	0.088	2.0
Selenium	0.41	J	0.34	5.0
Silver	0.011	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	4.2	J B	2.1	20
Tungsten	0.077	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1212			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	73		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW43C-081513**

Lab Sample ID: 240-28011-27
Client Matrix: Water

Date Sampled: 08/15/2013 0957
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	097SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1724			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.31	J	0.11	2.0
Arsenic	1.6	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	1.0	U	0.031	1.0
Cadmium	1.0	U	0.026	1.0
Chromium	0.19	J B	0.13	2.0
Cobalt	0.061	J	0.020	1.0
Copper	4.2	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.2	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.0090	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	6.9	J B	2.1	20
Tungsten	0.075	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1214			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	70		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW43D-081513**

Lab Sample ID: 240-28011-28
Client Matrix: Water

Date Sampled: 08/15/2013 1001
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	098SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1728			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.31	J	0.11	2.0
Arsenic	1.6	J B	0.063	5.0
Barium	17	B	0.32	5.0
Beryllium	1.0	U	0.031	1.0
Cadmium	0.031	J	0.026	1.0
Chromium	0.20	J B	0.13	2.0
Cobalt	0.077	J	0.020	1.0
Copper	4.2	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.5	J B	0.088	2.0
Selenium	0.43	J	0.34	5.0
Silver	1.0	U	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	2.1	J B	2.1	20
Tungsten	0.069	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1215			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	280		33	33
Calcium hardness as calcium carbonate	75		12	12
Magnesium hardness as calcium carbonate	200		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW44A-081513**

Lab Sample ID: 240-28011-29
Client Matrix: Water

Date Sampled: 08/15/2013 0920
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	099SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1732			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.30	J	0.11	2.0
Arsenic	1.6	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	1.0	U	0.031	1.0
Cadmium	0.034	J	0.026	1.0
Chromium	0.20	J B	0.13	2.0
Cobalt	0.20	J	0.020	1.0
Copper	4.2	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.6	J B	0.088	2.0
Selenium	0.38	J	0.34	5.0
Silver	1.0	U	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	2.8	J B	2.1	20
Tungsten	0.075	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1217			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	72		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW44B-081513**

Lab Sample ID: 240-28011-30
Client Matrix: Water

Date Sampled: 08/15/2013 0925
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	102SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1743			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.31	J	0.11	2.0
Arsenic	1.5	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	1.0	U	0.031	1.0
Cadmium	0.039	J	0.026	1.0
Chromium	0.20	J B	0.13	2.0
Cobalt	0.073	J	0.020	1.0
Copper	4.1	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.3	J B	0.088	2.0
Selenium	5.0	U	0.34	5.0
Silver	0.014	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	3.5	J B	2.1	20
Tungsten	0.12	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1218			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	72		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW44C-081513**

Lab Sample ID: 240-28011-31
Client Matrix: Water

Date Sampled: 08/15/2013 0929
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-97949	Lab File ID:	103SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1747			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 0802				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.30	J	0.11	2.0
Arsenic	1.6	J B	0.063	5.0
Barium	16	B	0.32	5.0
Beryllium	0.043	J	0.031	1.0
Cadmium	0.027	J	0.026	1.0
Chromium	0.19	J B	0.13	2.0
Cobalt	0.061	J	0.020	1.0
Copper	3.8	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.2	J B	0.088	2.0
Selenium	0.43	J	0.34	5.0
Silver	0.0090	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.0	J B	0.15	5.0
Zinc	20	U	2.1	20
Tungsten	0.085	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1219			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	71		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW44D-081513**

Lab Sample ID: 240-28011-32
Client Matrix: Water

Date Sampled: 08/15/2013 0936
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-98027	Lab File ID:	107SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1803			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.53	J	0.11	2.0
Arsenic	2.0	J B	0.063	5.0
Barium	19		0.32	5.0
Beryllium	0.34	J B	0.031	1.0
Cadmium	0.47	J	0.026	1.0
Chromium	0.75	J	0.13	2.0
Cobalt	0.54	J	0.020	1.0
Copper	4.8	B	0.24	2.0
Lead	0.75	J	0.14	1.0
Molybdenum	1.8	J	0.81	10
Nickel	1.9	J	0.088	2.0
Selenium	0.94	J	0.34	5.0
Silver	0.045	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.4	J B	0.15	5.0
Zinc	2.5	J B	2.1	20
Tungsten	0.36	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98303	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-97963	Lab File ID:	082013A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1221			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1310				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	300		33	33
Calcium hardness as calcium carbonate	80		12	12
Magnesium hardness as calcium carbonate	220		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW45A-081513**

Lab Sample ID: 240-28011-33
Client Matrix: Water

Date Sampled: 08/15/2013 0851
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-98027	Lab File ID:	111SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1819			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.56	J	0.11	2.0
Arsenic	1.9	J B	0.063	5.0
Barium	17		0.32	5.0
Beryllium	0.38	J B	0.031	1.0
Cadmium	0.30	J	0.026	1.0
Chromium	0.48	J	0.13	2.0
Cobalt	0.40	J	0.020	1.0
Copper	5.0	B	0.24	2.0
Lead	0.60	J	0.14	1.0
Molybdenum	1.6	J	0.81	10
Nickel	1.9	J	0.088	2.0
Selenium	0.91	J	0.34	5.0
Silver	0.035	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	2.1	J B	0.15	5.0
Zinc	3.4	J B	2.1	20
Tungsten	0.33	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98498	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-98123	Lab File ID:	082113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2013 1451			Final Weight/Volume:	50 mL
Prep Date:	08/20/2013 1240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	260		33	33
Calcium hardness as calcium carbonate	71		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW45B-081513**

Lab Sample ID: 240-28011-34
Client Matrix: Water

Date Sampled: 08/15/2013 0858
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-98027	Lab File ID:	114SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1831			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.32	J	0.11	2.0
Arsenic	1.4	J B	0.063	5.0
Barium	17		0.32	5.0
Beryllium	0.23	J B	0.031	1.0
Cadmium	0.042	J	0.026	1.0
Chromium	0.55	J	0.13	2.0
Cobalt	0.085	J	0.020	1.0
Copper	4.4	B	0.24	2.0
Lead	0.16	J	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	1.6	J	0.088	2.0
Selenium	0.38	J	0.34	5.0
Silver	0.025	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.7	J B	0.15	5.0
Zinc	6.7	J B	2.1	20
Tungsten	0.11	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98498	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-98123	Lab File ID:	082113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2013 1455			Final Weight/Volume:	50 mL
Prep Date:	08/20/2013 1240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	72		12	12
Magnesium hardness as calcium carbonate	190		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW45C-081513**

Lab Sample ID: 240-28011-35
Client Matrix: Water

Date Sampled: 08/15/2013 0903
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-98027	Lab File ID:	115SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1835			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.28	J	0.11	2.0
Arsenic	1.4	J B	0.063	5.0
Barium	17		0.32	5.0
Beryllium	0.13	J B	0.031	1.0
Cadmium	0.037	J	0.026	1.0
Chromium	0.23	J	0.13	2.0
Cobalt	0.16	J	0.020	1.0
Copper	4.0	B	0.24	2.0
Lead	0.17	J	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	3.3		0.088	2.0
Selenium	0.47	J	0.34	5.0
Silver	0.010	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.8	J B	0.15	5.0
Zinc	4.9	J B	2.1	20
Tungsten	0.092	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98498	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-98123	Lab File ID:	082113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2013 1500			Final Weight/Volume:	50 mL
Prep Date:	08/20/2013 1240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	73		12	12
Magnesium hardness as calcium carbonate	200		21	21

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Client Sample ID: **MSA-SW45D-081513**

Lab Sample ID: 240-28011-36
Client Matrix: Water

Date Sampled: 08/15/2013 0907
Date Received: 08/16/2013 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	240-98293	Instrument ID:	I10
Prep Method:	3005A	Prep Batch:	240-98027	Lab File ID:	116SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/20/2013 1839			Final Weight/Volume:	50 mL
Prep Date:	08/19/2013 1129				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.28	J	0.11	2.0
Arsenic	1.4	J B	0.063	5.0
Barium	17		0.32	5.0
Beryllium	0.10	J B	0.031	1.0
Cadmium	0.033	J	0.026	1.0
Chromium	0.20	J	0.13	2.0
Cobalt	0.13	J	0.020	1.0
Copper	3.9	B	0.24	2.0
Lead	1.0	U	0.14	1.0
Molybdenum	1.5	J	0.81	10
Nickel	3.1		0.088	2.0
Selenium	0.49	J	0.34	5.0
Silver	0.010	J B	0.0083	1.0
Thallium	2.0	U	0.40	2.0
Vanadium	1.9	J B	0.15	5.0
Zinc	3.6	J B	2.1	20
Tungsten	0.084	J	0.017	10

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-98498	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-98123	Lab File ID:	082113B-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2013 1501			Final Weight/Volume:	50 mL
Prep Date:	08/20/2013 1240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

SM 2340B Total Hardness (as CaCO3) by calculation-Dissolved

Analysis Method:	SM 2340B	Analysis Batch:	240-97883	Instrument ID:	NOEQUIP
	N/A		N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	08/16/2013 1609			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	Result (mg/L)	Qualifier	RL	RL
Hardness as calcium carbonate	270		33	33
Calcium hardness as calcium carbonate	74		12	12
Magnesium hardness as calcium carbonate	200		21	21

APPENDIX C

SUPPORT DOCUMENTATION

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.077

240-28011 Chain of Custody

2.8/3.2

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 1121COH793.08
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW37A-081513	8/15/2013	1227	SW	Water	4	x	x	x	x	
MSA-SW37B-081513	8/15/2013	1232	SW	Water	4	x	x	x	x	
MSA-SW37C-081513	8/15/2013	1237	SW	Water	4	x	x	x	x	
MSA-SW37D-081513	8/15/2013	1243	SW	Water	4	x	x	x	x	
MSA-SW38A-081513	8/15/2013	1126	SW	Water	4	x	x	x	x	
MSA-SW38B-081513	8/15/2013	1131	SW	Water	4	x	x	x	x	
MSA-SW38C-081513	8/15/2013	1135	SW	Water	4	x	x	x	x	
MSA-SW38D-081513	8/15/2013	1140	SW	Water	4	x	x	x	x	
MSA-SW39A-081513	8/15/2013	0826	SW	Water	4	x	x	x	x	
MSA-SW39B-081513	8/15/2013	0833	SW	Water	4	x	x	x	x	
MSA-SW39C-081513	8/15/2013	0838	SW	Water	4	x	x	x	x	
MSA-SW39D-081513	8/15/2013	0844	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**

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Tetratech	8/15/13 1430		TestAmerica	8/15/13 1500
Relinquished by:	TestAmerica	8/15/13 1640		TA	8-16-13 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Page 1414 of 1422

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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera 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. 112-IC0479308
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW40A-081513	8/15/2013	1146	SW	Water	4	x	x	x	x	
MSA-SW40B-081513	8/15/2013	1158	SW	Water	4	x	x	x	x	
MSA-SW40C-081513	8/15/2013	1202	SW	Water	4	x	x	x	x	
MSA-SW40D-081513	8/15/2013	1206	SW	Water	4	x	x	x	x	
MSA-SW41A-081513	8/15/2013	1009	SW	Water	4	x	x	x	x	
MSA-SW41B-081513	8/15/2013	1015	SW	Water	4	x	x	x	x	
MSA-SW41C-081513	8/15/2013	1019	SW	Water	4	x	x	x	x	
MSA-SW41D-081513	8/15/2013	1024	SW	Water	4	x	x	x	x	
MSA-SW42A-081513	8/15/2013	1209	SW	Water	4	x	x	x	x	
MSA-SW42B-081513	8/15/2013	1213	SW	Water	4	x	x	x	x	
MSA-SW42C-081513	8/15/2013	1217	SW	Water	4	x	x	x	x	
MSA-SW42D-081513	8/15/2013	1222	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	8/15/13 1430	[signature]	TestAmerica	8/15/13 / 1500
[signature]	TestAmerica	8/15/13/1640	[signature]	TA	8-16-13 930

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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	3 of 4 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			112-1004743.08
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Hardness	Sample Specific Notes:
MSA-SW43A-081513	8/15/2013	0947	SW	Water	4	x	x	x	x	
MSA-SW43B-081513	8/15/2013	0953	SW	Water	4	x	x	x	x	
MSA-SW43C-081513	8/15/2013	0957	SW	Water	4	x	x	x	x	
MSA-SW43D-081513	8/15/2013	1001	SW	Water	4	x	x	x	x	
MSA-SW44A-081513	8/15/2013	0920	SW	Water	4	x	x	x	x	
MSA-SW44B-081513	8/15/2013	0925	SW	Water	4	x	x	x	x	
MSA-SW44C-081513	8/15/2013	0929	SW	Water	4	x	x	x	x	
MSA-SW44D-081513	8/15/2013	0936	SW	Water	4	x	x	x	x	
MSA-SW45A-081513	8/15/2013	0851	SW	Water	4	x	x	x	x	
MSA-SW45B-081513	8/15/2013	0858	SW	Water	4	x	x	x	x	
MSA-SW45C-081513	8/15/2013	0903	SW	Water	4	x	x	x	x	
MSA-SW45D-081513	8/15/2013	0907	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**

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Tetra Tech	8/15/13 1730		TestAmerica	8/15/13 1500
Relinquished by:	TestAmerica	8/15/13 1640		TA	8-16-13 930
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

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/15/13	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	9 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			112IC04793.08
(301) 528-3021 Phone	TAT if different from Below: 3 DAYS			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☒ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Sample Specific Notes:
EL-SW01A-081513	8/15/2013	0800	SW	AQ	3		x	
EL-SW01B-081513	8/15/2013	0807	SW	AQ	3		x	
EL-SW01C-081513	8/15/2013	0814	SW	AQ	3		x	
EL-SW01D-081513	8/15/2013	0817	SW	AQ	3		x	
TB-081513	–	–	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:
[signature]	Tetra Tech	8/15/13 1430	[signature]	8/15/13/1500	TestAmerica
[signature]	TestAmerica	8/15/13/1640	[signature]	TA	8-16-13 930

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA Surface Water Sampling

Report Number: 240-28011-1

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 08/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 2.8 and 3.2 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples MSA-SW37A-081513 (240-28011-1), MSA-SW37B-081513 (240-28011-2), MSA-SW37C-081513 (240-28011-3), MSA-SW37D-081513 (240-28011-4), MSA-SW38A-081513 (240-28011-5), MSA-SW38B-081513 (240-28011-6), MSA-SW38C-081513 (240-28011-7), MSA-SW38D-081513 (240-28011-8), MSA-SW39A-081513 (240-28011-9), MSA-SW39B-081513 (240-28011-10), MSA-SW39C-081513 (240-28011-11), MSA-SW39D-081513 (240-28011-12), MSA-SW40A-081513 (240-28011-13), MSA-SW40B-081513 (240-28011-14), MSA-SW40C-081513 (240-28011-15), MSA-SW40D-081513 (240-28011-16), MSA-SW41A-081513 (240-28011-17), MSA-SW41B-081513 (240-28011-18), MSA-SW41C-081513 (240-28011-19), MSA-SW41D-081513 (240-28011-20), MSA-SW42A-081513 (240-28011-21), MSA-SW42B-081513 (240-28011-22), MSA-SW42C-081513 (240-28011-23), MSA-SW42D-081513 (240-28011-24), MSA-SW43A-081513 (240-28011-25), MSA-SW43B-081513 (240-28011-26), MSA-SW43C-081513 (240-28011-27), MSA-SW43D-081513 (240-28011-28), MSA-SW44A-081513 (240-28011-29), MSA-SW44B-081513 (240-28011-30), MSA-SW44C-081513 (240-28011-31), MSA-SW44D-081513 (240-28011-32), MSA-SW45A-081513 (240-28011-33), MSA-SW45B-081513 (240-28011-34), MSA-SW45C-081513 (240-28011-35), MSA-SW45D-081513 (240-28011-36), EL-SW01A-081513 (240-28011-37), EL-SW01B-081513 (240-28011-38), EL-SW01C-081513 (240-28011-39), EL-SW01D-081513 (240-28011-40) and TB-081513 (240-28011-41) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/19/2013 and 08/20/2013.

1,2,3-Trichlorobenzene was detected in method blank MB 240-98083/6 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.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)
Samples MSA-SW37A-081513 (240-28011-1), MSA-SW37B-081513 (240-28011-2), MSA-SW37C-081513 (240-28011-3), MSA-SW37D-081513 (240-28011-4), MSA-SW38A-081513 (240-28011-5), MSA-SW38B-081513 (240-28011-6), MSA-SW38C-081513 (240-28011-7), MSA-SW38D-081513 (240-28011-8), MSA-SW39A-081513 (240-28011-9), MSA-SW39B-081513 (240-28011-10), MSA-SW39C-081513 (240-28011-11), MSA-SW39D-081513 (240-28011-12), MSA-SW40A-081513 (240-28011-13), MSA-SW40B-081513 (240-28011-14), MSA-SW40C-081513 (240-28011-15), MSA-SW40D-081513 (240-28011-16), MSA-SW41A-081513 (240-28011-17), MSA-SW41B-081513 (240-28011-18), MSA-SW41C-081513 (240-28011-19), MSA-SW41D-081513 (240-28011-20), MSA-SW42A-081513 (240-28011-21), MSA-SW42B-081513 (240-28011-22),

MSA-SW42C-081513 (240-28011-23), MSA-SW42D-081513 (240-28011-24), MSA-SW43A-081513 (240-28011-25), MSA-SW43B-081513 (240-28011-26), MSA-SW43C-081513 (240-28011-27), MSA-SW43D-081513 (240-28011-28), MSA-SW44A-081513 (240-28011-29), MSA-SW44B-081513 (240-28011-30), MSA-SW44C-081513 (240-28011-31), MSA-SW44D-081513 (240-28011-32), MSA-SW45A-081513 (240-28011-33), MSA-SW45B-081513 (240-28011-34), MSA-SW45C-081513 (240-28011-35) and MSA-SW45D-081513 (240-28011-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/19/2013 and analyzed on 08/20/2013.

Several analytes were detected in method blank MB 240-97949/1-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, Copper, Silver, Tungsten and Vanadium were detected in method blank MB 240-97953/1-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.

Several analytes were detected in method blank MB 240-98027/1-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 other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples MSA-SW37A-081513 (240-28011-1), MSA-SW37B-081513 (240-28011-2), MSA-SW37C-081513 (240-28011-3), MSA-SW37D-081513 (240-28011-4), MSA-SW38A-081513 (240-28011-5), MSA-SW38B-081513 (240-28011-6), MSA-SW38C-081513 (240-28011-7), MSA-SW38D-081513 (240-28011-8), MSA-SW39A-081513 (240-28011-9), MSA-SW39B-081513 (240-28011-10), MSA-SW39C-081513 (240-28011-11), MSA-SW39D-081513 (240-28011-12), MSA-SW40A-081513 (240-28011-13), MSA-SW40B-081513 (240-28011-14), MSA-SW40C-081513 (240-28011-15), MSA-SW40D-081513 (240-28011-16), MSA-SW41A-081513 (240-28011-17), MSA-SW41B-081513 (240-28011-18), MSA-SW41C-081513 (240-28011-19), MSA-SW41D-081513 (240-28011-20), MSA-SW42A-081513 (240-28011-21), MSA-SW42B-081513 (240-28011-22), MSA-SW42C-081513 (240-28011-23), MSA-SW42D-081513 (240-28011-24), MSA-SW43A-081513 (240-28011-25), MSA-SW43B-081513 (240-28011-26), MSA-SW43C-081513 (240-28011-27), MSA-SW43D-081513 (240-28011-28), MSA-SW44A-081513 (240-28011-29), MSA-SW44B-081513 (240-28011-30), MSA-SW44C-081513 (240-28011-31), MSA-SW44D-081513 (240-28011-32), MSA-SW45A-081513 (240-28011-33), MSA-SW45B-081513 (240-28011-34), MSA-SW45C-081513 (240-28011-35) and MSA-SW45D-081513 (240-28011-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/19/2013 and 08/20/2013 and analyzed on 08/20/2013 and 08/21/2013.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

HARDNESS (AS CACO3) BY CALCULATION-DISSOLVED

Samples MSA-SW37A-081513 (240-28011-1), MSA-SW37B-081513 (240-28011-2), MSA-SW37C-081513 (240-28011-3), MSA-SW37D-081513 (240-28011-4), MSA-SW38A-081513 (240-28011-5), MSA-SW38B-081513 (240-28011-6), MSA-SW38C-081513 (240-28011-7), MSA-SW38D-081513 (240-28011-8), MSA-SW39A-081513 (240-28011-9), MSA-SW39B-081513 (240-28011-10), MSA-SW39C-081513 (240-28011-11), MSA-SW39D-081513 (240-28011-12), MSA-SW40A-081513 (240-28011-13), MSA-SW40B-081513 (240-28011-14), MSA-SW40C-081513 (240-28011-15), MSA-SW40D-081513 (240-28011-16), MSA-SW41A-081513 (240-28011-17), MSA-SW41B-081513 (240-28011-18), MSA-SW41C-081513 (240-28011-19), MSA-SW41D-081513 (240-28011-20), MSA-SW42A-081513 (240-28011-21), MSA-SW42B-081513 (240-28011-22), MSA-SW42C-081513 (240-28011-23), MSA-SW42D-081513 (240-28011-24), MSA-SW43A-081513 (240-28011-25), MSA-SW43B-081513 (240-28011-26), MSA-SW43C-081513 (240-28011-27), MSA-SW43D-081513 (240-28011-28), MSA-SW44A-081513 (240-28011-29), MSA-SW44B-081513 (240-28011-30), MSA-SW44C-081513 (240-28011-31), MSA-SW44D-081513 (240-28011-32), MSA-SW45A-081513 (240-28011-33), MSA-SW45B-081513 (240-28011-34), MSA-SW45C-081513 (240-28011-35) and MSA-SW45D-081513 (240-28011-36) were analyzed for dissolved hardness (as CaCO3) by calculation in accordance with SM 2340B. The samples were analyzed on 08/16/2013.

No difficulties were encountered during the hardness analysis. All quality control parameters were within the acceptance limits

Sample Report

Sample Table

Sample Name	240-28011-d-23-a
Data File Name	093SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\I10082013A.b
Acq Date Time	2013-08-20T17:08:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

31.79 $\frac{\mu g}{L}$ reported as 32 $\mu g/L$

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	0.058	0.058	51.45	211	0.03	10000	
B	11	45	2	NoGas	185.970	185.970	0.75	494325	0.04	500	
Na	23	45	1	He	352415.793	352415.793	0.91	395468784	0.09	500000	
Mg	24	45	1	He	44858.125	44858.125	0.81	26643029	0.17	500000	
Al	27	45	1	He	15.679	15.679	2.96	5004	0.31	200000	
K	39	45	1	He	15889.769	15889.769	0.70	11024274	0.14	500000	
Ca	44	45	1	He	28000.262	28000.262	0.82	976304	2.87	500000	
Ti	47	45	1	He	0.057	0.057	75.27	20	0.28	5000	
V	51	45	1	He	1.991	1.991	0.88	15856	0.01	10000	
Cr	52	45	1	He	0.186	0.186	5.65	1895	0.01	10000	
Mn	55	45	1	He	6.640	6.640	1.19	32789	0.02	10000	
Fe	56	45	1	He	7.512	7.512	1.26	58810	0.01	200000	
Co	59	45	1	He	0.056	0.056	3.93	773	0.01	10000	
Ni	60	45	1	He	1.286	1.286	1.03	4456	0.03	10000	
Cu	63	45	1	He	31.791	31.791	0.46	285258	0.01	10000	
Zn	66	45	1	He	23.897	23.897	0.57	33928	0.07	10000	
As	75	115	1	He	1.755	1.755	0.51	1709	0.10	10000	
Se	78	115	1	He	0.202	0.202	89.62	117	0.17	10000	
Sr	88	45	1	He	343.596	343.596	0.88	2032023	0.02	10000	
Mo	95	103	1	He	1.492	1.492	2.48	6233	0.02	2000	
Ag	107	103	1	He	0.029	0.029	1.90	377	0.01	300	
Cd	111	115	1	He	0.016	0.016	88.28	98	0.02	4000	
Sn	118	115	1	He	0.163	0.163	9.31	796	0.02	2000	
Sb	123	115	1	He	0.331	0.331	6.28	1370	0.02	300	
Ba	137	115	1	He	15.265	15.265	0.69	28576	0.05	10000	
W	182	159	1	He	0.085	0.085	14.03	982	0.01	10000	
Tl	205	209	1	He	0.008	0.008	8.79	186	0.00	5000	
Pb	208	209	1	He	0.101	0.101	1.53	3152	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	454860	1.18	635708	71.55	30	120	
Sc	45	1	He	200116	0.93	228933	87.41	30	120	
Sc	45	2	NoGas	4100757	0.69	4448191	92.19	30	120	
Rh	103	1	He	2048344	0.34	2312577	88.57	30	120	
In	115	1	He	931195	0.38	1050621	88.63	30	120	
Tb	159	1	He	2524812	0.52	2633515	95.87	30	120	
Ho	165	1	He	2488377	0.46	2594199	95.92	30	120	
Bi	209	1	He	1422791	0.88	1623001	87.66	30	120	

TestAmerica Canton Sample Receipt Form/Narrative Login # : 28011
Canton Facility

Client Tetratech Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8.16.13 Opened on 8.16.13

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 −1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☑ See Multiple Cooler Form
IR GUN# 5	(CF +1 °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 _____ 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# HC376062
11. Were VOAs on the COC? Yes No
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: [signature]

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): _____

Ref: SOP NC-SC-0005, Sample Receiving
\\Canstv10\public\QAQC\SOPS\Work Instructions\WI-NC-099-061413, Rev 1 Cooler Receipt Form.doc rls

TestAmerica Multiple Cooler Receipt Form/Narrative Login # : 28011
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CANTON	8	2.8	2.8	ICE
client	1	3.2	3.2	1

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MSA-SW37A-081513	240-28011-D-1	Plastic 500ml - with Nitric Acid	<2		
MSA-SW37B-081513	240-28011-D-2	Plastic 500ml - with Nitric Acid	<2		
MSA-SW37C-081513	240-28011-D-3	Plastic 500ml - with Nitric Acid	<2		
MSA-SW37D-081513	240-28011-D-4	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38A-081513	240-28011-D-5	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38B-081513	240-28011-D-6	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38C-081513	240-28011-D-7	Plastic 500ml - with Nitric Acid	<2		
MSA-SW38D-081513	240-28011-D-8	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39A-081513	240-28011-D-9	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39B-081513	240-28011-D-10	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39C-081513	240-28011-D-11	Plastic 500ml - with Nitric Acid	<2		
MSA-SW39D-081513	240-28011-D-12	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40A-081513	240-28011-D-13	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40B-081513	240-28011-D-14	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40C-081513	240-28011-D-15	Plastic 500ml - with Nitric Acid	<2		
MSA-SW40D-081513	240-28011-D-16	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41A-081513	240-28011-D-17	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41B-081513	240-28011-D-18	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41C-081513	240-28011-D-19	Plastic 500ml - with Nitric Acid	<2		
MSA-SW41D-081513	240-28011-D-20	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42A-081513	240-28011-D-21	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42B-081513	240-28011-D-22	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42C-081513	240-28011-D-23	Plastic 500ml - with Nitric Acid	<2		
MSA-SW42D-081513	240-28011-D-24	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43A-081513	240-28011-D-25	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43B-081513	240-28011-D-26	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43C-081513	240-28011-D-27	Plastic 500ml - with Nitric Acid	<2		
MSA-SW43D-081513	240-28011-D-28	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44A-081513	240-28011-D-29	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44B-081513	240-28011-D-30	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44C-081513	240-28011-D-31	Plastic 500ml - with Nitric Acid	<2		
MSA-SW44D-081513	240-28011-D-32	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45A-081513	240-28011-D-33	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45B-081513	240-28011-D-34	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45C-081513	240-28011-D-35	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45D-081513	240-28011-D-36	Plastic 500ml - with Nitric Acid	<2		

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-28011-1

Login Number: 28011
List Number: 1
Creator: McFadden, John

List Source: TestAmerica Canton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

HOLDTIME

SDG 240-28011-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-SW43D-081513	240-28011-28	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW41C-081513	240-28011-19	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW41D-081513	240-28011-20	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW42A-081513	240-28011-21	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW42B-081513	240-28011-22	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW42C-081513	240-28011-23	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW42D-081513	240-28011-24	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW41B-081513	240-28011-18	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW43B-081513	240-28011-26	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW43C-081513	240-28011-27	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW44B-081513	240-28011-30	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW44C-081513	240-28011-31	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW44D-081513	240-28011-32	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW45A-081513	240-28011-33	NM	08/15/2013	08/20/2013	08/21/2013	5	1	6
HG	UG/L	MSA-SW45B-081513	240-28011-34	NM	08/15/2013	08/20/2013	08/21/2013	5	1	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-SW45C-081513	240-28011-35	NM	08/15/2013	08/20/2013	08/21/2013	5	1	6
HG	UG/L	MSA-SW45D-081513	240-28011-36	NM	08/15/2013	08/20/2013	08/21/2013	5	1	6
HG	UG/L	MSA-SW43A-081513	240-28011-25	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW38C-081513	240-28011-7	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW44A-081513	240-28011-29	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW41A-081513	240-28011-17	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW37B-081513	240-28011-2	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW37C-081513	240-28011-3	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW37D-081513	240-28011-4	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW38B-081513	240-28011-6	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW37A-081513	240-28011-1	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW38D-081513	240-28011-8	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW40B-081513	240-28011-14	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW40D-081513	240-28011-16	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW38A-081513	240-28011-5	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW40C-081513	240-28011-15	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW40A-081513	240-28011-13	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW39D-081513	240-28011-12	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MSA-SW39C-081513	240-28011-11	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW39B-081513	240-28011-10	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HG	UG/L	MSA-SW39A-081513	240-28011-9	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW39D-081513	240-28011-12	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW41D-081513	240-28011-20	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW41C-081513	240-28011-19	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW41A-081513	240-28011-17	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW40D-081513	240-28011-16	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW40C-081513	240-28011-15	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW40B-081513	240-28011-14	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW40A-081513	240-28011-13	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW41B-081513	240-28011-18	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW39C-081513	240-28011-11	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW39B-081513	240-28011-10	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW39A-081513	240-28011-9	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW38D-081513	240-28011-8	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW38C-081513	240-28011-7	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW38B-081513	240-28011-6	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	MSA-SW38A-081513	240-28011-5	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW37A-081513	240-28011-1	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW42A-081513	240-28011-21	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW37D-081513	240-28011-4	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW37C-081513	240-28011-3	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW45A-081513	240-28011-33	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW42B-081513	240-28011-22	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW37B-081513	240-28011-2	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW45D-081513	240-28011-36	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW45B-081513	240-28011-34	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW44D-081513	240-28011-32	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW44C-081513	240-28011-31	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW44B-081513	240-28011-30	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW43D-081513	240-28011-28	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW43C-081513	240-28011-27	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW43B-081513	240-28011-26	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW42C-081513	240-28011-23	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW43A-081513	240-28011-25	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	MSA-SW44A-081513	240-28011-29	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW45C-081513	240-28011-35	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
M	UG/L	MSA-SW42D-081513	240-28011-24	NM	08/15/2013	08/19/2013	08/20/2013	4	1	5
HARD	MG/L	MSA-SW42A-081513	240-28011-21	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW43C-081513	240-28011-27	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW43B-081513	240-28011-26	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW43A-081513	240-28011-25	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW42D-081513	240-28011-24	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW42B-081513	240-28011-22	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW43D-081513	240-28011-28	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW45C-081513	240-28011-35	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW42C-081513	240-28011-23	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW44A-081513	240-28011-29	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW44B-081513	240-28011-30	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW44C-081513	240-28011-31	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW44D-081513	240-28011-32	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW41D-081513	240-28011-20	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW45B-081513	240-28011-34	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HARD	MG/L	MSA-SW39D-081513	240-28011-12	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW45D-081513	240-28011-36	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW45A-081513	240-28011-33	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW39B-081513	240-28011-10	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW37B-081513	240-28011-2	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW37C-081513	240-28011-3	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW37D-081513	240-28011-4	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW38A-081513	240-28011-5	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW37A-081513	240-28011-1	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW38B-081513	240-28011-6	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW38C-081513	240-28011-7	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW40B-081513	240-28011-14	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW39A-081513	240-28011-9	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW41C-081513	240-28011-19	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW39C-081513	240-28011-11	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW40A-081513	240-28011-13	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW40C-081513	240-28011-15	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1
HARD	MG/L	MSA-SW40D-081513	240-28011-16	NM	08/15/2013	08/16/2013	08/16/2013	1	0	1

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-28011-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 MDL Date: 07/23/2013 10:21

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: 240-28011-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 XMDL Date: 05/07/2013 08:56

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: 240-28011-1

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: 240-28011-1

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: 240-28011-1

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: 240-28011-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: SM 2340B XMDL Date: 04/14/2011 14:07

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Calcium hardness as calcium carbonate		12000	325
Hardness as calcium carbonate		33000	465
Magnesium hardness as calcium carbonate		21000	140

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28011-1

SDG No.:

Instrument ID: I10 Date: 04/01/2013 10:55

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		300	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		4000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Lead		4000	6020
Molybdenum		2000	6020
Nickel		10000	6020
Selenium		10000	6020
Silver		300	6020
Thallium		5000	6020
Vanadium		10000	6020
Zinc		10000	6020
Tungsten		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-28011-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		50	7470A

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-97957/1-A	08/19/2013 13:10	97957		50	50
LCS 240-97957/2-A	08/19/2013 13:10	97957		50	50
240-28010-O-3-E MS	08/19/2013 13:10	97957		50	50
240-28010-O-3-F MSD	08/19/2013 13:10	97957		50	50
240-28011-1	08/19/2013 13:10	97957		50	50
240-28011-2	08/19/2013 13:10	97957		50	50
240-28011-3	08/19/2013 13:10	97957		50	50
240-28011-4	08/19/2013 13:10	97957		50	50
240-28011-5	08/19/2013 13:10	97957		50	50
240-28011-6	08/19/2013 13:10	97957		50	50
240-28011-7	08/19/2013 13:10	97957		50	50
240-28011-8	08/19/2013 13:10	97957		50	50
240-28011-9	08/19/2013 13:10	97957		50	50
240-28011-10	08/19/2013 13:10	97957		50	50
240-28011-11	08/19/2013 13:10	97957		50	50
240-28011-12	08/19/2013 13:10	97957		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-97957/1-A

Instrument Code: H1 Batch No.: 98303

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-28010-O-3-E MS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

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	0.973		0.20	U	1.00	97	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: _____ Lab ID: 240-28010-O-3-F MSD

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.02		1.00	102	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

Lab ID: LCS 240-97957/2-A

Lab Name: TestAmerica Canton Job No.: 240-28011-1

Sample Matrix: Water LCS Source: MTHGCALW_00444

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.71		94	81	123		7470A

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

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-97963/1-A	08/19/2013 13:10	97963		50	50
LCS 240-97963/2-A	08/19/2013 13:10	97963		50	50
240-28011-13	08/19/2013 13:10	97963		50	50
240-28011-13 MS	08/19/2013 13:10	97963		50	50
240-28011-13 MSD	08/19/2013 13:10	97963		50	50
240-28011-14	08/19/2013 13:10	97963		50	50
240-28011-15	08/19/2013 13:10	97963		50	50
240-28011-16	08/19/2013 13:10	97963		50	50
240-28011-17	08/19/2013 13:10	97963		50	50
240-28011-18	08/19/2013 13:10	97963		50	50
240-28011-19	08/19/2013 13:10	97963		50	50
240-28011-20	08/19/2013 13:10	97963		50	50
240-28011-21	08/19/2013 13:10	97963		50	50
240-28011-22	08/19/2013 13:10	97963		50	50
240-28011-23	08/19/2013 13:10	97963		50	50
240-28011-24	08/19/2013 13:10	97963		50	50
240-28011-25	08/19/2013 13:10	97963		50	50
240-28011-26	08/19/2013 13:10	97963		50	50
240-28011-27	08/19/2013 13:10	97963		50	50
240-28011-28	08/19/2013 13:10	97963		50	50
240-28011-29	08/19/2013 13:10	97963		50	50
240-28011-30	08/19/2013 13:10	97963		50	50
240-28011-31	08/19/2013 13:10	97963		50	50
240-28011-32	08/19/2013 13:10	97963		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-97963/1-A

Instrument Code: H1 Batch No.: 98303

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-97963/2-A

Lab Name: TestAmerica Canton Job No.: 240-28011-1

Sample Matrix: Water LCS Source: MTHGCALW_00444

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.78		96	81	123		7470A

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

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-98123/1-A	08/20/2013 12:40	98123		50	50
LCS 240-98123/2-A	08/20/2013 12:40	98123		50	50
240-28011-33	08/20/2013 12:40	98123		50	50
240-28011-33 MS	08/20/2013 12:40	98123		50	50
240-28011-33 MSD	08/20/2013 12:40	98123		50	50
240-28011-34	08/20/2013 12:40	98123		50	50
240-28011-35	08/20/2013 12:40	98123		50	50
240-28011-36	08/20/2013 12:40	98123		50	50

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-98123/1-A

Instrument Code: H1 Batch No.: 98498

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW45A-081513 MS
Lab ID: 240-28011-33 MS
Lab Name: TestAmerica Canton
Job No.: 240-28011-1
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	0.941		0.20	U	1.00	94	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-SW45A-081513 MSD
Lab ID: 240-28011-33 MSD
Lab Name: TestAmerica Canton
Job No.: 240-28011-1
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	0.974		1.00	97	69-134	4	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

Lab ID: LCS 240-98123/2-A

Lab Name: TestAmerica Canton Job No.: 240-28011-1

Sample Matrix: Water LCS Source: MTHGCALW_00445

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.75		95	81	123		7470A

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

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-97949/1-A	08/19/2013 08:02	97949		50	50
LCS 240-97949/2-A	08/19/2013 08:02	97949		50	50
240-28011-13	08/19/2013 08:02	97949		50	50
240-28011-13 MS	08/19/2013 08:02	97949		50	50
240-28011-13 MSD	08/19/2013 08:02	97949		50	50
240-28011-14	08/19/2013 08:02	97949		50	50
240-28011-15	08/19/2013 08:02	97949		50	50
240-28011-16	08/19/2013 08:02	97949		50	50
240-28011-17	08/19/2013 08:02	97949		50	50
240-28011-18	08/19/2013 08:02	97949		50	50
240-28011-19	08/19/2013 08:02	97949		50	50
240-28011-20	08/19/2013 08:02	97949		50	50
240-28011-21	08/19/2013 08:02	97949		50	50
240-28011-22	08/19/2013 08:02	97949		50	50
240-28011-23	08/19/2013 08:02	97949		50	50
240-28011-24	08/19/2013 08:02	97949		50	50
240-28011-25	08/19/2013 08:02	97949		50	50
240-28011-26	08/19/2013 08:02	97949		50	50
240-28011-27	08/19/2013 08:02	97949		50	50
240-28011-28	08/19/2013 08:02	97949		50	50
240-28011-29	08/19/2013 08:02	97949		50	50
240-28011-30	08/19/2013 08:02	97949		50	50
240-28011-31	08/19/2013 08:02	97949		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-97949/1-A

Instrument Code: I10 Batch No.: 98293

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	0.109	J		6020
7440-39-3	Barium	0.515	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	0.180	J		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	0.921	J		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	0.0960	J		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	0.0270	J		6020
7440-28-0	Thallium	2.0	U		6020
7440-62-2	Vanadium	0.227	J		6020
7440-66-6	Zinc	6.44	J		6020
7440-70-2	Calcium	123	J		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	10	U		6020

FORM III-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW40A-081513 MS | Lab ID: 240-28011-13 MS

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

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	94.0		0.35	J	100	94	44-153		6020
Arsenic	894		1.7	J	1000	89	82-123		6020
Barium	968		15		1000	95	45-144		6020
Beryllium	1010		0.092	J	1000	101	77-124		6020
Cadmium	910		0.048	J	1000	91	78-117		6020
Chromium	920		0.19	J	1000	92	72-110		6020
Cobalt	939		0.10	J	1000	94	67-114		6020
Copper	930		4.0		1000	93	60-123		6020
Lead	974		0.19	J	1000	97	73-115		6020
Molybdenum	97.3		1.5	J	100	96	80-110		6020
Nickel	927		1.3	J	1000	93	72-111		6020
Selenium	869		0.35	J	1000	87	72-148		6020
Silver	89.4		0.018	J	100	89	10-139		6020
Thallium	243		2.0	U	250	97	69-117		6020
Vanadium	941		1.6	J	1000	94	70-112		6020
Zinc	911		20	U	1000	91	49-156		6020
Calcium	36900		27000		10000	97	70-130		6020
Magnesium	50800		43000		10000	78 OK	70-130	4	6020
Tungsten	92.3		0.15	J	100	92	43-133		6020
Mercury	1.01		0.20	U	1.00	101	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-SW40A-081513 MSD | Lab ID: 240-28011-13 MSD

Lab Name: TestAmerica Canton | Job No.: 240-28011-1

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	98.1	100	98	44-153	4	20		6020
Arsenic	930	1000	93	82-123	4	20		6020
Barium	1020	1000	100	45-144	5	20		6020
Beryllium	1040	1000	104	77-124	3	20		6020
Cadmium	956	1000	96	78-117	5	20		6020
Chromium	989	1000	99	72-110	7	20		6020
Cobalt	1010	1000	101	67-114	7	20		6020
Copper	1000	1000	100	60-123	7	20		6020
Lead	1010	1000	101	73-115	3	20		6020
Molybdenum	101	100	100	80-110	4	20		6020
Nickel	997	1000	100	72-111	7	20		6020
Selenium	906	1000	91	72-148	4	20		6020
Silver	93.9	100	94	10-139	5	20		6020
Thallium	253	250	101	69-117	4	20		6020
Vanadium	1010	1000	101	70-112	7	20		6020
Zinc	981	1000	98	49-156	7	20		6020
Calcium	40600	10000	134	70-130	10	20	F	6020
Magnesium	54800	10000	117	70-130	8	20	4	6020
Tungsten	96.6	100	96	43-133	5	20		6020
Mercury	1.00	1.00	100	69-134	0	20		7470A

SDR = Sample Duplicate Result

Not on Analyte list

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 240-97949/2-A

Lab Name: TestAmerica Canton Job No.: 240-28011-1

Sample Matrix: Water LCS Source: MTICPMSB_00013

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	96.4		96	80	120		6020
Arsenic	1000	910		91	80	120		6020
Barium	1000	990		99	80	120		6020
Beryllium	1000	1010		101	80	120		6020
Cadmium	1000	1020		102	80	120		6020
Chromium	1000	979		98	80	120		6020
Cobalt	1000	1030		103	80	120		6020
Copper	1000	1050		105	80	120		6020
Lead	1000	969		97	80	120		6020
Molybdenum	100	93.4		93	80	120		6020
Nickel	1000	1040		104	80	120		6020
Selenium	1000	935		93	80	120		6020
Silver	100	96.5		96	80	120		6020
Thallium	250	243		97	80	120		6020
Vanadium	1000	977		98	80	120		6020
Zinc	1000	1050		105	80	120		6020
Calcium	10000	10300		103	80	120		6020
Magnesium	10000	9230		92	80	120		6020
Tungsten	100	94.3		94	80	120		6020

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-28011-13

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28011-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.35	J	10	U	NC		6020
Arsenic	1.7	J	1.95	J	NC		6020
Barium	15		15.7	J	NC		6020
Beryllium	0.092	J	0.250	J	NC		6020
Cadmium	0.048	J	5.0	U	NC		6020
Chromium	0.19	J	10	U	NC		6020
Cobalt	0.10	J	0.140	J	NC		6020
Copper	4.0		5.75	J	NC		6020
Lead	0.19	J	5.0	U	NC		6020
Molybdenum	1.5	J	50	U	NC		6020
Nickel	1.3	J	1.36	J	NC		6020
Selenium	0.35	J	25	U	NC		6020
Silver	0.018	J	0.0750	J	NC		6020
Thallium	2.0	U	10	U	NC		6020
Vanadium	1.6	J	2.64	J	NC		6020
Zinc	20	U	100	U	NC		6020
Calcium	27000		29200		NC		6020
Magnesium	43000		46100		NC		6020
Tungsten	0.15	J	0.175	J	NC		6020

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

FORM VIII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-97953/1-A	08/19/2013 08:16	97953		50	50
LCS 240-97953/2-A	08/19/2013 08:16	97953		50	50
240-28010-O-3-B MS	08/19/2013 08:16	97953		50	50
240-28010-O-3-C MSD	08/19/2013 08:16	97953		50	50
240-28011-1	08/19/2013 08:16	97953		50	50
240-28011-2	08/19/2013 08:16	97953		50	50
240-28011-3	08/19/2013 08:16	97953		50	50
240-28011-4	08/19/2013 08:16	97953		50	50
240-28011-5	08/19/2013 08:16	97953		50	50
240-28011-6	08/19/2013 08:16	97953		50	50
240-28011-7	08/19/2013 08:16	97953		50	50
240-28011-8	08/19/2013 08:16	97953		50	50
240-28011-9	08/19/2013 08:16	97953		50	50
240-28011-10	08/19/2013 08:16	97953		50	50
240-28011-11	08/19/2013 08:16	97953		50	50
240-28011-12	08/19/2013 08:16	97953		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-97953/1-A

Instrument Code: I10 Batch No.: 98293

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	0.104	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	1.84	J		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	0.0130	J		6020
7440-28-0	Thallium	2.0	U		6020
7440-62-2	Vanadium	0.241	J		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	0.0420	J		6020

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-28010-O-3-B MS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

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	98.6		0.40	J	100	98	44-153		6020
Arsenic	1030		86		1000	94	82-123		6020
Barium	1090		90		1000	100	45-144		6020
Beryllium	1040		0.62	J	1000	104	77-124		6020
Cadmium	1000		0.62	J	1000	100	78-117		6020
Chromium	1020		1.2	J	1000	101	72-110		6020
Cobalt	1060		1.3		1000	106	67-114		6020
Copper	1050		1.4	J	1000	105	60-123		6020
Lead	996		1.2		1000	100	73-115		6020
Molybdenum	100		1.8	J	100	99	80-110		6020
Nickel	1050		3.7		1000	105	72-111		6020
Selenium	917		1.0	J	1000	92	72-148		6020
Silver	96.1		0.064	J	100	96	10-139		6020
Thallium	248		2.0	U	250	99	69-117		6020
Vanadium	1020		1.2	J	1000	102	70-112		6020
Zinc	1030		4.9	J	1000	102	49-156		6020
Calcium	78100		61000		10000	174	70-130	4	6020
Magnesium	19900		9400		10000	105	70-130		6020
Tungsten	98.5		0.42	J	100	98	43-133		6020

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-28010-O-3-C MSD

Lab Name: TestAmerica Canton Job No.: 240-28011-1

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	93.5		100	93	44-153	5	20		6020
Arsenic	980		1000	89	82-123	5	20		6020
Barium	1040		1000	95	45-144	5	20		6020
Beryllium	1010		1000	101	77-124	4	20		6020
Cadmium	949		1000	95	78-117	6	20		6020
Chromium	954		1000	95	72-110	6	20		6020
Cobalt	993		1000	99	67-114	7	20		6020
Copper	988		1000	99	60-123	6	20		6020
Lead	953		1000	95	73-115	4	20		6020
Molybdenum	95.7		100	94	80-110	5	20		6020
Nickel	987		1000	98	72-111	7	20		6020
Selenium	872		1000	87	72-148	5	20		6020
Silver	91.6		100	92	10-139	5	20		6020
Thallium	236		250	94	69-117	5	20		6020
Vanadium	961		1000	96	70-112	6	20		6020
Zinc	974		1000	97	49-156	6	20		6020
Calcium	74500		10000	137 ok	70-130	5	20	4	6020
Magnesium	18700		10000	94	70-130	6	20		6020
Tungsten	94.8		100	94	43-133	4	20		6020

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 240-97953/2-A

Lab Name: TestAmerica Canton Job No.: 240-28011-1

Sample Matrix: Water LCS Source: MTICPMSB_00013

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	105		105	80	120		6020
Arsenic	1000	990		99	80	120		6020
Barium	1000	1060		106	80	120		6020
Beryllium	1000	994		99	80	120		6020
Cadmium	1000	1110		111	80	120		6020
Chromium	1000	1070		107	80	120		6020
Cobalt	1000	1120		112	80	120		6020
Copper	1000	1150		115	80	120		6020
Lead	1000	986		99	80	120		6020
Molybdenum	100	101		101	80	120		6020
Nickel	1000	1130		113	80	120		6020
Selenium	1000	1010		101	80	120		6020
Silver	100	104		104	80	120		6020
Thallium	250	245		98	80	120		6020
Vanadium	1000	1060		106	80	120		6020
Zinc	1000	1140		114	80	120		6020
Calcium	10000	11300		113	80	120		6020
Magnesium	10000	10200		102	80	120		6020
Tungsten	100	105		105	80	120		6020

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-28010-J-3-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28011-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.35	J	10	U	NC		6020
Arsenic	110		115		NC		6020
Barium	94		104		NC		6020
Beryllium	0.35	J	0.555	J	NC		6020
Cadmium	0.62	J	0.360	J	NC		6020
Chromium	1.9	J	1.93	J	NC		6020
Cobalt	1.3		1.20	J	NC		6020
Copper	2.4		4.57	J	NC		6020
Lead	1.2		1.94	J	NC		6020
Molybdenum	1.8	J	50	U	NC		6020
Nickel	4.0		4.04	J	NC		6020
Selenium	0.62	J	25	U	NC		6020
Silver	0.062	J	0.0450	J	NC		6020
Thallium	2.0	U	10	U	NC		6020
Vanadium	1.6	J	1.27	J	NC		6020
Zinc	8.4	J	11.9	J	NC		6020
Calcium	66000		72800		NC		6020
Magnesium	10000		11300		NC		6020
Tungsten	0.40	J	0.375	J	NC		6020

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

FORM VIII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-98027/1-A	08/19/2013 11:29	98027		50	50
LCS 240-98027/2-A	08/19/2013 11:29	98027		50	50
240-28011-32	08/19/2013 11:29	98027		50	50
240-28011-32 MS	08/19/2013 11:29	98027		50	50
240-28011-32 MSD	08/19/2013 11:29	98027		50	50
240-28011-33	08/19/2013 11:29	98027		50	50
240-28011-34	08/19/2013 11:29	98027		50	50
240-28011-35	08/19/2013 11:29	98027		50	50
240-28011-36	08/19/2013 11:29	98027		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-98027/1-A

Instrument Code: I10 Batch No.: 98293

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	0.159	J		6020
7440-39-3	Barium	5.0	U		6020
7440-41-7	Beryllium	0.0380	J		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	1.24	J		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	0.0110	J		6020
7440-28-0	Thallium	2.0	U		6020
7440-62-2	Vanadium	0.609	J		6020
7440-66-6	Zinc	2.21	J		6020
7440-70-2	Calcium	1000	U		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	10	U		6020

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW44D-081513 MS
Lab ID: 240-28011-32 MS
Lab Name: TestAmerica Canton
Job No.: 240-28011-1
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	98.7		0.53	J	100	98	44-153		6020
Arsenic	952		2.0	J	1000	95	82-123		6020
Barium	1010		19		1000	99	45-144		6020
Beryllium	1050		0.34	J	1000	104	77-124		6020
Cadmium	939		0.47	J	1000	94	78-117		6020
Chromium	947		0.75	J	1000	95	72-110		6020
Cobalt	958		0.54	J	1000	96	67-114		6020
Copper	938		4.8		1000	93	60-123		6020
Lead	1010		0.75	J	1000	101	73-115		6020
Molybdenum	104		1.8	J	100	102	80-110		6020
Nickel	940		1.9	J	1000	94	72-111		6020
Selenium	925		0.94	J	1000	92	72-148		6020
Silver	93.9		0.045	J	100	94	10-139		6020
Thallium	253		2.0	U	250	101	69-117		6020
Vanadium	971		2.4	J	1000	97	70-112		6020
Zinc	933		2.5	J	1000	93	49-156		6020
Calcium	41200		32000		10000	92	70-130		6020
Magnesium	57500		52000		10000	52	70-130	4	6020
Tungsten	94.7		0.36	J	100	94	43-133		6020

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW44D-081513 MSD
Lab ID: 240-28011-32 MSD
Lab Name: TestAmerica Canton
Job No.: 240-28011-1
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	102		100	101	44-153	3	20		6020
Arsenic	980		1000	98	82-123	3	20		6020
Barium	1050		1000	103	45-144	4	20		6020
Beryllium	1070		1000	107	77-124	2	20		6020
Cadmium	982		1000	98	78-117	4	20		6020
Chromium	977		1000	98	72-110	3	20		6020
Cobalt	989		1000	99	67-114	3	20		6020
Copper	974		1000	97	60-123	4	20		6020
Lead	1030		1000	103	73-115	2	20		6020
Molybdenum	105		100	103	80-110	1	20		6020
Nickel	969		1000	97	72-111	3	20		6020
Selenium	944		1000	94	72-148	2	20		6020
Silver	95.5		100	95	10-139	2	20		6020
Thallium	259		250	104	69-117	2	20		6020
Vanadium	1000		1000	100	70-112	3	20		6020
Zinc	964		1000	96	49-156	3	20		6020
Calcium	42300		10000	103	70-130	3	20		6020
Magnesium	58500		10000	61	70-130	2	20	4	6020
Tungsten	97.4		100	97	43-133	3	20		6020

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 240-98027/2-A

Lab Name: TestAmerica Canton Job No.: 240-28011-1

Sample Matrix: Water LCS Source: MTICPMSB_00013

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	99.1		99	80	120		6020
Arsenic	1000	936		94	80	120		6020
Barium	1000	1010		101	80	120		6020
Beryllium	1000	1080		108	80	120		6020
Cadmium	1000	1040		104	80	120		6020
Chromium	1000	995		99	80	120		6020
Cobalt	1000	1040		104	80	120		6020
Copper	1000	1060		106	80	120		6020
Lead	1000	950		95	80	120		6020
Molybdenum	100	94.7		95	80	120		6020
Nickel	1000	1050		105	80	120		6020
Selenium	1000	970		97	80	120		6020
Silver	100	96.5		97	80	120		6020
Thallium	250	236		95	80	120		6020
Vanadium	1000	992		99	80	120		6020
Zinc	1000	1060		106	80	120		6020
Calcium	10000	10600		106	80	120		6020
Magnesium	10000	9400		94	80	120		6020
Tungsten	100	95.5		95	80	120		6020

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-28011-32

SDG No:

Lab Name: TestAmerica Canton Job No: 240-28011-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.53	J	10	U	NC		6020
Arsenic	2.0	J	1.87	J	NC		6020
Barium	19		17.7	J	NC		6020
Beryllium	0.34	J	0.585	J	NC		6020
Cadmium	0.47	J	5.0	U	NC		6020
Chromium	0.75	J	10	U	NC		6020
Cobalt	0.54	J	0.215	J	NC		6020
Copper	4.8		6.84	J	NC		6020
Lead	0.75	J	0.745	J	NC		6020
Molybdenum	1.8	J	50	U	NC		6020
Nickel	1.9	J	1.75	J	NC		6020
Selenium	0.94	J	25	U	NC		6020
Silver	0.045	J	0.0450	J	NC		6020
Thallium	2.0	U	10	U	NC		6020
Vanadium	2.4	J	3.39	J	NC		6020
Zinc	2.5	J	100	U	NC		6020
Calcium	32000		31500		NC		6020
Magnesium	52000		51400		NC		6020
Tungsten	0.36	J	0.215	J	NC		6020

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

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/20/2013 09:01 End Date: 08/20/2013 12:24

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
IC 240-97955/1-A			09:01	X
IC 240-97955/1-A			09:03	X
IC 240-97955/2-A			09:04	X
IC 240-97955/2-A			09:06	X
IC 240-97955/3-A			09:07	X
IC 240-97955/3-A			09:09	X
IC 240-97955/4-A			09:10	X
IC 240-97955/4-A			09:12	X
IC 240-97955/5-A			09:13	X
IC 240-97955/5-A			09:15	X
IC 240-97955/6-A			09:16	X
IC 240-97955/6-A			09:18	X
IC 240-97955/7-A			09:19	X
IC 240-97955/7-A			09:21	X
ICV 240-97955/8-A	1		09:45	X
ICB 240-97955/9-A	1		09:46	X
CRA 240-97955/10-A	1		09:48	X
CCV 240-97955/13-A	1		10:49	X
CCB 240-97955/12-A	1		10:51	X
MB 240-97957/1-A	1	T	10:52	X
LCS 240-97957/2-A	1	T	10:53	X
ZZZZZZ			10:55	
ZZZZZZ			10:56	
ZZZZZZ			10:58	
ZZZZZZ			10:59	
240-28010-O-3-E MS	1	D	11:01	X
240-28010-O-3-F MSD	1	D	11:02	X
ZZZZZZ			11:04	
ZZZZZZ			11:05	
CCV 240-97955/13-A	1		11:07	X
CCB 240-97955/12-A	1		11:08	X
ZZZZZZ			11:10	
ZZZZZZ			11:11	
240-28011-1	1	D	11:13	X
240-28011-2	1	D	11:15	X
240-28011-3	1	D	11:17	X
240-28011-4	1	D	11:18	X
240-28011-5	1	D	11:21	X
240-28011-6	1	D	11:22	X
240-28011-7	1	D	11:23	X
240-28011-8	1	D	11:26	X
CCV 240-97955/13-A	1		11:27	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/20/2013 09:01 End Date: 08/20/2013 12:24

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
CCB 240-97955/12-A	1		11:29	X
240-28011-9	1	D	11:31	X
240-28011-10	1	D	11:32	X
240-28011-11	1	D	11:33	X
240-28011-12	1	D	11:35	X
ZZZZZZ			11:38	
ZZZZZZ			11:39	
MB 240-97963/1-A	1	T	11:40	X
LCS 240-97963/2-A	1	T	11:42	X
240-28011-13	1	D	11:44	X
240-28011-13 MS	1	D	11:45	X
CCV 240-97955/13-A	1		11:46	X
CCB 240-97955/12-A	1		11:47	X
240-28011-13 MSD	1	D	11:49	X
240-28011-14	1	D	11:51	X
240-28011-15	1	D	11:52	X
240-28011-16	1	D	11:54	X
240-28011-17	1	D	11:56	X
240-28011-18	1	D	11:57	X
240-28011-19	1	D	11:59	X
240-28011-20	1	D	12:00	X
240-28011-21	1	D	12:01	X
240-28011-22	1	D	12:03	X
CCV 240-97955/13-A	1		12:04	X
CCB 240-97955/12-A	1		12:06	X
240-28011-23	1	D	12:08	X
240-28011-24	1	D	12:09	X
240-28011-25	1	D	12:11	X
240-28011-26	1	D	12:12	X
240-28011-27	1	D	12:14	X
240-28011-28	1	D	12:15	X
240-28011-29	1	D	12:17	X
240-28011-30	1	D	12:18	X
240-28011-31	1	D	12:19	X
240-28011-32	1	D	12:21	X
CCV 240-97955/13-A	1		12:23	X
CCB 240-97955/12-A	1		12:24	X

Prep Types
D = Dissolved
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00444

Analyte	ICV 240-97955/8-A 08/20/2013 09:45				CCV 240-97955/13-A 08/20/2013 10:49				CCV 240-97955/13-A 08/20/2013 11:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.08		5.00	102	9.76		10.0	98	9.95		10.0	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00444

Analyte	CCV 240-97955/13-A 08/20/2013 11:27				CCV 240-97955/13-A 08/20/2013 11:46				CCV 240-97955/13-A 08/20/2013 12:04			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.1		10.0	101	10.3		10.0	103	10.3		10.0	103

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.: 240-28011-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00444

Analyte	CCV 240-97955/13-A 08/20/2013 12:23											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	10.3		10.0	103								

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.: 240-28011-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-97955/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00444

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.190	J	95	50-150

Lab Sample ID: CRA 240-98321/10-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00446

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.174	J	87	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-97955/9-A 08/20/2013 09:46		CCB 240-97955/12-A 08/20/2013 10:51		CCB 240-97955/12-A 08/20/2013 11:08		CCB 240-97955/12-A 08/20/2013 11:29	
		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.: 240-28011-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-97955/12-A 08/20/2013 11:47		CCB 240-97955/12-A 08/20/2013 12:06		CCB 240-97955/12-A 08/20/2013 12:24			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/21/2013 13:38 End Date: 08/21/2013 15:31

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
IC 240-98321/1-A			13:38	X
IC 240-98321/1-A			13:40	X
IC 240-98321/2-A			13:41	X
IC 240-98321/2-A			13:42	X
IC 240-98321/3-A			13:44	X
IC 240-98321/3-A			13:45	X
IC 240-98321/4-A			13:47	X
IC 240-98321/4-A			13:48	X
IC 240-98321/5-A			13:49	X
IC 240-98321/5-A			13:51	X
IC 240-98321/6-A			13:52	X
IC 240-98321/6-A			13:54	X
IC 240-98321/7-A			13:55	X
IC 240-98321/7-A			13:57	X
ICV 240-98321/8-A	1		13:58	X
ICB 240-98321/9-A	1		13:59	X
CRA 240-98321/10-A	1		14:01	X
CCVL 240-98321/11-A	1		14:03	X
CCB 240-98321/12-A			14:05	
ZZZZZZ			14:06	
ZZZZZZ			14:08	
ZZZZZZ			14:09	
ZZZZZZ			14:10	
ZZZZZZ			14:11	
ZZZZZZ			14:13	
ZZZZZZ			14:14	
ZZZZZZ			14:15	
ZZZZZZ			14:16	
ZZZZZZ			14:18	
CCV 240-98321/13-A			14:20	
CCB 240-98321/12-A			14:21	
ZZZZZZ			14:23	
ZZZZZZ			14:25	
ZZZZZZ			14:26	
ZZZZZZ			14:28	
ZZZZZZ			14:29	
ZZZZZZ			14:31	
ZZZZZZ			14:32	
ZZZZZZ			14:34	
ZZZZZZ			14:36	
ZZZZZZ			14:37	
CCV 240-98321/13-A	1		14:39	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/21/2013 13:38 End Date: 08/21/2013 15:31

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
CCB 240-98321/12-A	1		14:40	X
ZZZZZZ			14:42	
ZZZZZZ			14:43	
ZZZZZZ			14:45	
ZZZZZZ			14:46	
MB 240-98123/1-A	1	T	14:48	X
LCS 240-98123/2-A	1	T	14:49	X
240-28011-33	1	D	14:51	X
240-28011-33 MS	1	D	14:52	X
240-28011-33 MSD	1	D	14:54	X
240-28011-34	1	D	14:55	X
CCV 240-98321/13-A	1		14:57	X
CCB 240-98321/12-A	1		14:59	X
240-28011-35	1	D	15:00	X
240-28011-36	1	D	15:01	X
ZZZZZZ			15:03	
ZZZZZZ			15:04	
ZZZZZZ			15:06	
ZZZZZZ			15:07	
ZZZZZZ			15:10	
ZZZZZZ			15:12	
ZZZZZZ			15:13	
ZZZZZZ			15:14	
CCV 240-98321/13-A	1		15:16	X
CCB 240-98321/12-A	1		15:17	X
ZZZZZZ			15:18	
ZZZZZZ			15:20	
ZZZZZZ			15:21	
ZZZZZZ			15:23	
ZZZZZZ			15:25	
ZZZZZZ			15:26	
ZZZZZZ			15:28	
CCV 240-98321/13-A			15:30	
CCB 240-98321/12-A			15:31	

Prep Types
D = Dissolved
T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00446

Analyte	ICV 240-98321/8-A 08/21/2013 13:58				CCVL 240-98321/11-A 08/21/2013 14:03				CCV 240-98321/13-A 08/21/2013 14:39			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.91		5.00	98	10.1		10.0	101	9.97		10.0	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICV Source: MTHgStd_00009 Concentration Units: ug/L

CCV Source: MTHGCALW_00446

Analyte	CCV 240-98321/13-A 08/21/2013 14:57				CCV 240-98321/13-A 08/21/2013 15:16							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	9.93		10.0	99	9.93		10.0	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-98321/9-A 08/21/2013 13:59		CCB 240-98321/12-A 08/21/2013 14:40		CCB 240-98321/12-A 08/21/2013 14:59		CCB 240-98321/12-A 08/21/2013 15:17	
		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.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/20/2013 10:42 End Date: 08/20/2013 20:42

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			10:42																				
ICIS 240-98293/2			10:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD1 240-98293/3 IC	1		10:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD2 240-98293/4 IC	1		10:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD3 240-98293/5 IC	1		11:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
STD4 240-98293/6 IC	1		11:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICV 240-98293/7	1		11:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICB 240-98293/8	1		11:12	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CRI 240-98293/9	1		11:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA 240-98293/10	1		11:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 240-98293/11	1		11:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 240-98293/12			11:28																				
CCB 240-98293/13			11:32																				
CCV 240-98293/14			11:37																				
CCB 240-98293/15			11:41																				
ZZZZZZ			11:45																				
ZZZZZZ			11:49																				
ZZZZZZ			11:53																				
ZZZZZZ			11:57																				
ZZZZZZ			12:01																				
ZZZZZZ			12:05																				
ZZZZZZ			12:09																				
ZZZZZZ			12:13																				
ZZZZZZ			12:16																				
ZZZZZZ			12:20								-												
CCV 240-98293/26			12:24																				
CCB 240-98293/27			12:28																				
CCV 240-98293/28			12:32																				
CCB 240-98293/29			12:36																				
ZZZZZZ			12:40																				
ZZZZZZ			12:44																				
ZZZZZZ			12:48																				
ZZZZZZ			12:52																				
ZZZZZZ			12:56																				
ZZZZZZ			13:00																				
ZZZZZZ			13:04																				
ZZZZZZ			13:08																				
CCV 240-98293/38			13:12																				
CCB 240-98293/39			13:16																				
CCV 240-98293/40	1		13:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-98293/41	1		13:41	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
MB 240-97953/1-A	1	R	13:45	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/20/2013 10:42 End Date: 08/20/2013 20:42

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 240-97953/2-A	1	R	13:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			13:53																			
240-28010-J-3-A SD ^5	5	R	13:57	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			14:00																			
ZZZZZZ			14:05																			
ZZZZZZ			14:09																			
ZZZZZZ			14:13																			
240-28010-O-3-B MS	1	D	14:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-28010-O-3-C MSD	1	D	14:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-98293/52	1		14:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-98293/53	1		14:29	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			14:32																			
ZZZZZZ			14:36																			
ZZZZZZ			14:40																			
ZZZZZZ			14:44																			
240-28011-1	1	D	14:48	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-2	1	D	14:52	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-3	1	D	14:56	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-4	1	D	15:00	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-5	1	D	15:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-6	1	D	15:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
CCV 240-98293/64	1		15:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-98293/65	1		15:16	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-7	1	D	15:20	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-8	1	D	15:24	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-9	1	D	15:28	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-10	1	D	15:32	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-11	1	D	15:36	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-12	1	D	15:40	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
ZZZZZZ			15:44																			
ZZZZZZ			15:48																			
MB 240-97949/1-A	1	R	15:52	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
LCS 240-97949/2-A	1	R	15:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 240-98293/76	1		16:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 240-98293/77	1		16:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-13	1	D	16:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-13 SD	5	D	16:12	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-13 MS	1	D	16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-28011-13 MSD	1	D	16:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
240-28011-14	1	D	16:24	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-15	1	D	16:28	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X
240-28011-16	1	D	16:32	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.: 240-28011-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/20/2013 10:42 End Date: 08/20/2013 20:42

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Mg	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn	
240-28011-17	1	D	16:36	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-18	1	D	16:40	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-19	1	D	16:44	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-98293/88	1		16:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-98293/89	1		16:52	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-20	1	D	16:56	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-21	1	D	17:00	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-22	1	D	17:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-23	1	D	17:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-24	1	D	17:12	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-25	1	D	17:16	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-26	1	D	17:20	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-27	1	D	17:24	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-28	1	D	17:28	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-29	1	D	17:32	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-98293/100	1		17:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-98293/101	1		17:40	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-30	1	D	17:43	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-31	1	D	17:47	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			17:51																				
MB 240-98027/1-A	1	R	17:55	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
LCS 240-98027/2-A	1	R	17:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-28011-32	1	D	18:03	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-32 SD	5	D	18:07	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-32 MS	1	D	18:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-28011-32 MSD	1	D	18:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
240-28011-33	1	D	18:19	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
CCV 240-98293/112	1		18:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-98293/113	1		18:27	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-34	1	D	18:31	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-35	1	D	18:35	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
240-28011-36	1	D	18:39	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			18:43																				
ZZZZZZ			18:47																				
ZZZZZZ			18:51																				
ZZZZZZ			18:55																				
ZZZZZZ			18:59																				
ZZZZZZ			19:03																				
ZZZZZZ			19:07																				
CCV 240-98293/124	1		19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB 240-98293/125	1		19:15	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	
ZZZZZZ			19:19																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: I10 Method: 6020

Start Date: 08/20/2013 10:42 End Date: 08/20/2013 20:42

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			19:23																					
ZZZZZZ			19:27																					
ZZZZZZ			19:31																					
ZZZZZZ			19:35																					
ZZZZZZ			19:39																					
ZZZZZZ			19:43																					
ZZZZZZ			19:47																					
ZZZZZZ			19:51																					
ZZZZZZ			19:55																					
CCV 240-98293/136			19:59																					
CCB 240-98293/137			20:02																					
ZZZZZZ			20:06																					
ZZZZZZ			20:10																					
ZZZZZZ			20:14																					
ZZZZZZ			20:18																					
ZZZZZZ			20:22																					
ZZZZZZ			20:26																					
ZZZZZZ			20:30																					
ZZZZZZ			20:34																					
CCV 240-98293/146			20:38																					
CCB 240-98293/147			20:42																					

Prep Types
D = Dissolved
R = Total Recoverable

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICV Source: MTMSICVW_00029 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00073

Analyte	ICV 240-98293/7 08/20/2013 11:08				CCV 240-98293/40 08/20/2013 13:37				CCV 240-98293/52 08/20/2013 14:25			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	42.0		40.0	105	50.5		50.0	101	50.9		50.0	102
Arsenic	41.6		40.0	104	49.2		50.0	98	49.3		50.0	99
Barium	41.8		40.0	104	49.6		50.0	99	50.5		50.0	101
Beryllium	38.9		40.0	97	49.2		50.0	98	52.5		50.0	105
Cadmium	42.7		40.0	107	50.3		50.0	101	50.7		50.0	101
Calcium	20100		20000	101	25000		25000	100	24900		25000	99
Chromium	40.5		40.0	101	49.5		50.0	99	50.9		50.0	102
Cobalt	40.1		40.0	100	50.5		50.0	101	51.9		50.0	104
Copper	42.0		40.0	105	51.4		50.0	103	52.5		50.0	105
Lead	41.8		40.0	104	50.2		50.0	100	50.8		50.0	102
Magnesium	19900		20000	100	24300		25000	97	24000		25000	96
Molybdenum	43.4		40.0	108	52.0		50.0	104	52.4		50.0	105
Nickel	40.6		40.0	101	50.7		50.0	101	51.9		50.0	104
Selenium	42.4		40.0	106	48.9		50.0	98	48.5		50.0	97
Silver	42.7		40.0	107	50.4		50.0	101	50.5		50.0	101
Thallium	42.1		40.0	105	50.2		50.0	100	50.1		50.0	100
Tungsten	41.6		40.0	104	49.5		50.0	99	51.1		50.0	102
Vanadium	40.4		40.0	101	49.7		50.0	99	50.8		50.0	102
Zinc	42.5		40.0	106	50.8		50.0	102	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.: 240-28011-1

SDG No.:

ICV Source: MTMSICVW_00029 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00073

Analyte	CCV 240-98293/64 08/20/2013 15:12				CCV 240-98293/76 08/20/2013 16:00				CCV 240-98293/88 08/20/2013 16:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	49.8		50.0	100	50.0		50.0	100	49.7		50.0	99
Arsenic	48.5		50.0	97	48.2		50.0	96	48.0		50.0	96
Barium	49.2		50.0	98	50.4		50.0	101	49.3		50.0	99
Beryllium	51.5		50.0	103	52.2		50.0	104	53.1		50.0	106
Cadmium	49.4		50.0	99	50.1		50.0	100	49.1		50.0	98
Calcium	24600		25000	98	24800		25000	99	24600		25000	98
Chromium	49.0		50.0	98	51.0		50.0	102	49.0		50.0	98
Cobalt	50.1		50.0	100	51.7		50.0	103	50.0		50.0	100
Copper	50.6		50.0	101	52.4		50.0	105	50.1		50.0	100
Lead	48.5		50.0	97	49.7		50.0	99	50.5		50.0	101
Magnesium	23800		25000	95	23900		25000	96	23900		25000	95
Molybdenum	50.2		50.0	100	50.8		50.0	102	50.8		50.0	102
Nickel	50.2		50.0	100	51.9		50.0	104	50.1		50.0	100
Selenium	48.3		50.0	97	48.9		50.0	98	48.5		50.0	97
Silver	48.2		50.0	96	48.7		50.0	97	48.7		50.0	97
Thallium	48.4		50.0	97	49.2		50.0	98	50.8		50.0	102
Tungsten	49.0		50.0	98	49.5		50.0	99	49.2		50.0	98
Vanadium	49.1		50.0	98	50.8		50.0	102	49.5		50.0	99
Zinc	49.5		50.0	99	51.6		50.0	103	49.7		50.0	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICV Source: MTMSICVW_00029 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00073

Analyte	CCV 240-98293/100 08/20/2013 17:36				CCV 240-98293/112 08/20/2013 18:23				CCV 240-98293/124 08/20/2013 19:11			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	50.0		50.0	100	49.3		50.0	99	50.2		50.0	100
Arsenic	48.7		50.0	97	47.7		50.0	95	46.9		50.0	94
Barium	50.2		50.0	100	49.2		50.0	98	49.6		50.0	99
Beryllium	53.1		50.0	106	52.4		50.0	105	53.8		50.0	108
Cadmium	49.5		50.0	99	48.8		50.0	98	49.2		50.0	98
Calcium	25200		25000	101	24800		25000	99	24700		25000	99
Chromium	49.5		50.0	99	49.2		50.0	98	49.9		50.0	100
Cobalt	50.4		50.0	101	50.1		50.0	100	51.5		50.0	103
Copper	51.1		50.0	102	50.7		50.0	101	52.0		50.0	104
Lead	49.5		50.0	99	49.4		50.0	99	49.9		50.0	100
Magnesium	24100		25000	96	23700		25000	95	23300		25000	93
Molybdenum	51.4		50.0	103	50.2		50.0	100	50.4		50.0	101
Nickel	50.4		50.0	101	49.9		50.0	100	51.6		50.0	103
Selenium	50.0		50.0	100	47.6		50.0	95	47.4		50.0	95
Silver	49.5		50.0	99	48.5		50.0	97	49.2		50.0	98
Thallium	49.3		50.0	99	49.4		50.0	99	49.7		50.0	99
Tungsten	49.3		50.0	99	48.2		50.0	96	48.8		50.0	98
Vanadium	50.1		50.0	100	49.5		50.0	99	49.9		50.0	100
Zinc	51.0		50.0	102	49.3		50.0	99	50.9		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.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-98293/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00008

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.04		102	50-150
Arsenic	5.00	4.96	J	99	50-150
Barium	5.00	4.84	J	97	50-150
Beryllium	1.00	1.03		103	50-150
Cadmium	1.00	0.991	J	99	50-150
Chromium	2.00	2.08		104	50-150
Cobalt	1.00	1.10		110	50-150
Copper	2.00	2.49		124	50-150
Lead	1.00	1.04		104	50-150
Molybdenum	10.0	10.0		100	50-150
Nickel	2.00	2.17		108	50-150
Selenium	5.00	4.78	J	96	50-150
Silver	1.00	1.06		106	50-150
Thallium	2.00	2.00		100	50-150
Vanadium	5.00	4.97	J	99	50-150
Zinc	20.0	20.3		102	50-150
Calcium	1000	1010		101	50-150
Magnesium	1000	1020		102	50-150
Tungsten	10.0	10.1		101	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-98293/8 08/20/2013 11:12		CCB 240-98293/41 08/20/2013 13:41		CCB 240-98293/53 08/20/2013 14:29		CCB 240-98293/65 08/20/2013 15:16	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.238	J	2.0	U	0.194	J	0.121	J
Arsenic	5.0	5.0	U	5.0	U	0.145	J	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	0.0320	J	1.0	U	0.293	J	0.113	J
Cadmium	1.0	0.0290	J	1.0	U	0.0850	J	0.0420	J
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	0.0490	J	0.0210	J	0.103	J	0.0400	J
Copper	2.0	0.464	J	0.756	J	0.461	J	0.457	J
Lead	1.0	1.0	U	1.0	U	0.470	J	1.0	U
Magnesium	1000	23.0	J	1000	U	19.8	J	21.5	J
Molybdenum	10	10	U	10	U	10	U	10	U
Nickel	2.0	2.0	U	2.0	U	0.0940	J	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	0.0540	J	0.0220	J	0.0560	J	0.0510	J
Thallium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Tungsten	10	0.221	J	0.144	J	0.244	J	0.173	J
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	2.95	J	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.: 240-28011-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-98293/77 08/20/2013 16:04		CCB 240-98293/89 08/20/2013 16:52		CCB 240-98293/101 08/20/2013 17:40		CCB 240-98293/113 08/20/2013 18:27	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.121	J	0.120	J	2.0	U	0.114	J
Arsenic	5.0	5.0	U	0.0640	J	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	0.109	J	0.0790	J	0.0330	J	0.161	J
Cadmium	1.0	0.0350	J	0.0310	J	0.0260	J	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	0.0350	J	0.0400	J	0.0270	J	0.0220	J
Copper	2.0	0.485	J	0.588	J	0.703	J	0.721	J
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	21.1	J	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	0.0330	J	0.0520	J	0.0350	J	0.0230	J
Thallium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Tungsten	10	0.188	J	0.188	J	0.172	J	0.150	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.: 240-28011-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-98293/125 08/20/2013 19:15							
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U						
Arsenic	5.0	5.0	U						
Barium	5.0	5.0	U						
Beryllium	1.0	0.0510	J						
Cadmium	1.0	1.0	U						
Calcium	1000	1000	U						
Chromium	2.0	2.0	U						
Cobalt	1.0	1.0	U						
Copper	2.0	0.749	J						
Lead	1.0	1.0	U						
Magnesium	1000	1000	U						
Molybdenum	10	10	U						
Nickel	2.0	2.0	U						
Selenium	5.0	5.0	U						
Silver	1.0	0.0240	J						
Thallium	2.0	2.0	U						
Tungsten	10	0.173	J						
Vanadium	5.0	5.0	U						
Zinc	20	20	U						

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Lab Sample ID: ICSA 240-98293/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00030

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.194**	
Arsenic		**0.0640**	
Barium		**0.0820**	
Beryllium		**0.0030**	
Cadmium		**0.0140**	
Calcium	**50000**	**49098**	**98**
Chromium		**0.555**	
Cobalt		**0.0170**	
Copper		**1.45**	
Lead		**0.0880**	
Magnesium	**50000**	**48562**	**97**
Molybdenum	**1000**	**1042**	**104**
Nickel		**0.381**	
Selenium		**-0.114**	
Silver		**0.0240**	
Thallium		**0.0090**	
Tungsten		**0.180**	
Vanadium		**-0.0740**	
Zinc		**0.921**	
Aluminum	*50000*	*46754*	*94*
Boron		*0.810*	
Iron	*50000*	*50235*	*100*
Manganese		*0.0510*	
Potassium	*50000*	*49138*	*98*
Sodium	*50000*	*48675*	*97*
Strontium		*2.25*	
Tin		*0.141*	
Titanium	*1000*	*990*	*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.: 240-28011-1

SDG No.:

Lab Sample ID: ICSAB 240-98293/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00029

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**105**	**105**
Arsenic	**100**	**103**	**103**
Barium	**100**	**104**	**104**
Beryllium	**100**	**105**	**105**
Cadmium	**100**	**105**	**105**
Calcium	**50000**	**50870**	**102**
Chromium	**100**	**105**	**105**
Cobalt	**100**	**107**	**107**
Copper	**100**	**107**	**107**
Lead	**100**	**104**	**104**
Magnesium	**50000**	**50044**	**100**
Molybdenum	**1100**	**1190**	**108**
Nickel	**100**	**108**	**108**
Selenium	**100**	**101**	**101**
Silver	**100**	**104**	**104**
Thallium	**100**	**104**	**104**
Tungsten	**100**	**104**	**104**
Vanadium	**100**	**104**	**104**
Zinc	**100**	**110**	**110**
Aluminum	*50000*	*48115*	*96*
Boron	*100*	*95.6*	*96*
Iron	*50000*	*52515*	*105*
Manganese	*100*	*106*	*106*
Potassium	*50000*	*50820*	*102*
Sodium	*50000*	*50156*	*100*
Strontium	*100*	*109*	*109*
Tin	*100*	*106*	*106*
Titanium	*1100*	*1135*	*103*

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

FORM IVA-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/20/2013 End Date: 08/20/2013

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 240-98293/3 IC	10:51	96		94		100		95		94	
STD2 240-98293/4 IC	10:56	85		98		88		98		98	
STD3 240-98293/5 IC	11:00	92		97		97		93		94	
STD4 240-98293/6 IC	11:04	91		96		96		100		98	
ICV 240-98293/7	11:08	93		97		103		92		92	
ICB 240-98293/8	11:12	92		99		98		101		100	
CRI 240-98293/9	11:16	91		98		100		101		100	
ICSA 240-98293/10	11:20	81		94		93		93		96	
ICSAB 240-98293/11	11:24	77		87		90		89		89	
CCV 240-98293/40	13:37	83		97		96		96		98	
CCB 240-98293/41	13:41	83		98		96		103		101	
MB 240-97953/1-A	13:45	76		87		88		98		96	
LCS 240-97953/2-A	13:49	73		77		86		90		84	
240-28010-J-3-A SD	13:57	77		88		93		96		96	
240-28010-J-3-A PDS	14:00	70		81		87		90		86	
240-28010-O-3-B MS	14:17	67		80		86		91		88	
240-28010-O-3-C MSD	14:21	67		82		88		92		88	
CCV 240-98293/52	14:25	80		94		96		97		98	
CCB 240-98293/53	14:29	81		89		97		97		95	
240-28011-1	14:48	69		82		88		87		87	
240-28011-2	14:52	72		85		91		88		88	
240-28011-3	14:56	92		81		1[illegible]	*	83		83	
240-28011-4	15:00	73		86		91		87		87	
240-28011-5	15:04	73		87		92		89		89	
240-28011-6	15:08	74		86		93		87		87	
CCV 240-98293/64	15:12	80		95		98		98		97	
CCB 240-98293/65	15:16	78		92		94		99		98	
240-28011-7	15:20	73		88		91		89		90	
240-28011-8	15:24	75		86		93		86		88	
240-28011-9	15:28	75		89		92		89		89	
240-28011-10	15:32	62		90		78		90		90	
240-28011-11	15:36	72		90		92		91		92	
240-28011-12	15:40	73		85		92		83		85	
MB 240-97949/1-A	15:52	69		86		84		95		92	
LCS 240-97949/2-A	15:56	63		78		81		89		85	
CCV 240-98293/76	16:00	72		87		90		93		92	
CCB 240-98293/77	16:04	71		90		89		97		96	
240-28011-13	16:08	66		78		84		83		83	
240-28011-13 SD	16:12	75		89		92		93		94	
240-28011-13 MS	16:16	61		80		82		85		84	
240-28011-13 MSD	16:20	60		76		80		82		81	
240-28011-14	16:24	64		82		84		87		87	

FORM XV - IN

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/20/2013 End Date: 08/20/2013

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
240-28011-15	16:28	70		83		89		86		86	
240-28011-16	16:32	70		85		91		87		88	
240-28011-17	16:36	70		87		92		88		89	
240-28011-18	16:40	72		88		94		88		90	
240-28011-19	16:44	70		85		90		86		87	
CCV 240-98293/88	16:48	76		94		95		96		96	
CCB 240-98293/89	16:52	76		92		94		97		96	
240-28011-20	16:56	74		84		92		84		87	
240-28011-21	17:00	72		89		91		88		89	
240-28011-22	17:04	74		89		94		89		90	
240-28011-23	17:08	72		87		92		89		89	
240-28011-24	17:12	56		88		75		89		90	
240-28011-25	17:16	72		90		93		90		92	
240-28011-26	17:20	75		87		96		86		87	
240-28011-27	17:24	75		92		96		92		92	
240-28011-28	17:28	73		88		96		88		88	
240-28011-29	17:32	71		90		93		88		90	
CCV 240-98293/100	17:36	79		97		99		98		99	
CCB 240-98293/101	17:40	80		93		100		97		97	
240-28011-30	17:43	74		90		96		89		91	
240-28011-31	17:47	75		89		95		87		88	
MB 240-98027/1-A	17:55	72		87		91		99		96	
LCS 240-98027/2-A	17:59	67		84		87		95		90	
240-28011-32	18:03	71		83		92		84		86	
240-28011-32 SD	18:07	77		94		96		95		96	
240-28011-32 MS	18:11	67		83		88		83		83	
240-28011-32 MSD	18:15	64		82		87		83		82	
240-28011-33	18:19	70		83		91		83		84	
CCV 240-98293/112	18:23	75		94		97		97		97	
CCB 240-98293/113	18:27	74		93		93		99		99	
240-28011-34	18:31	69		85		90		84		87	
240-28011-35	18:35	76		90		96		88		90	
240-28011-36	18:39	73		89		94		87		88	
CCV 240-98293/124	19:11	59		80		82		88		87	
CCB 240-98293/125	19:15	60		79		81		89		88	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/20/2013 End Date: 08/20/2013

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-98293/3 IC	10:51	97		96		97					
STD2 240-98293/4 IC	10:56	101		101		99					
STD3 240-98293/5 IC	11:00	98		98		94					
STD4 240-98293/6 IC	11:04	101		100		102					
ICV 240-98293/7	11:08	95		95		94					
ICB 240-98293/8	11:12	102		101		103					
CRI 240-98293/9	11:16	102		102		103					
ICSA 240-98293/10	11:20	101		101		99					
ICSAB 240-98293/11	11:24	96		96		92					
CCV 240-98293/40	13:37	102		101		97					
CCB 240-98293/41	13:41	103		103		104					
MB 240-97953/1-A	13:45	101		101		110					
LCS 240-97953/2-A	13:49	95		95		98					
240-28010-J-3-A SD	13:57	101		101		102					
240-28010-J-3-A PDS	14:00	99		99		95					
240-28010-O-3-B MS	14:17	101		101		94					
240-28010-O-3-C MSD	14:21	100		101		94					
CCV 240-98293/52	14:25	103		103		100					
CCB 240-98293/53	14:29	98		98		100					
240-28011-1	14:48	96		96		90					
240-28011-2	14:52	95		96		90					
240-28011-3	14:56	89		90		83					
240-28011-4	15:00	94		95		88					
240-28011-5	15:04	96		96		89					
240-28011-6	15:08	94		94		87					
CCV 240-98293/64	15:12	103		102		100					
CCB 240-98293/65	15:16	100		99		100					
240-28011-7	15:20	97		96		91					
240-28011-8	15:24	93		93		87					
240-28011-9	15:28	96		96		88					
240-28011-10	15:32	98		98		90					
240-28011-11	15:36	99		99		91					
240-28011-12	15:40	91		91		84					
MB 240-97949/1-A	15:52	97		97		100					
LCS 240-97949/2-A	15:56	96		95		93					
CCV 240-98293/76	16:00	98		98		95					
CCB 240-98293/77	16:04	98		98		97					
240-28011-13	16:08	91		92		85					
240-28011-13 SD	16:12	98		98		94					
240-28011-13 MS	16:16	94		94		84					
240-28011-13 MSD	16:20	92		92		83					
240-28011-14	16:24	95		95		88					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 08/20/2013 End Date: 08/20/2013

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-28011-15	16:28	93		93		86					
240-28011-16	16:32	95		96		88					
240-28011-17	16:36	97		97		88					
240-28011-18	16:40	96		97		88					
240-28011-19	16:44	94		94		87					
CCV 240-98293/88	16:48	101		100		94					
CCB 240-98293/89	16:52	99		99		99					
240-28011-20	16:56	93		92		86					
240-28011-21	17:00	96		96		89					
240-28011-22	17:04	97		97		88					
240-28011-23	17:08	96		96		88					
240-28011-24	17:12	97		96		88					
240-28011-25	17:16	98		98		90					
240-28011-26	17:20	93		93		86					
240-28011-27	17:24	99		99		90					
240-28011-28	17:28	96		96		87					
240-28011-29	17:32	97		97		88					
CCV 240-98293/100	17:36	103		102		98					
CCB 240-98293/101	17:40	98		98		97					
240-28011-30	17:43	97		97		90					
240-28011-31	17:47	94		94		85					
MB 240-98027/1-A	17:55	101		101		104					
LCS 240-98027/2-A	17:59	102		102		101					
240-28011-32	18:03	93		93		85					
240-28011-32 SD	18:07	99		99		93					
240-28011-32 MS	18:11	92		91		81					
240-28011-32 MSD	18:15	92		92		81					
240-28011-33	18:19	91		92		83					
CCV 240-98293/112	18:23	102		101		96					
CCB 240-98293/113	18:27	101		100		100					
240-28011-34	18:31	93		93		86					
240-28011-35	18:35	95		96		87					
240-28011-36	18:39	94		94		86					
CCV 240-98293/124	19:11	95		95		89					
CCB 240-98293/125	19:15	92		92		93					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 2340B

Start Date: 08/16/2013 16:09 End Date: 08/16/2013 16:09

Lab Sample ID	D / F	Type	Time	Analytes																						
				CaCO3	HardCC	MgHARD																				
240-28011-1	1	D	16:09	X	X	X																				
240-28011-2	1	D	16:09	X	X	X																				
240-28011-3	1	D	16:09	X	X	X																				
240-28011-4	1	D	16:09	X	X	X																				
240-28011-5	1	D	16:09	X	X	X																				
240-28011-6	1	D	16:09	X	X	X																				
240-28011-7	1	D	16:09	X	X	X																				
240-28011-8	1	D	16:09	X	X	X																				
240-28011-9	1	D	16:09	X	X	X																				
240-28011-10	1	D	16:09	X	X	X																				
240-28011-11	1	D	16:09	X	X	X																				
240-28011-12	1	D	16:09	X	X	X																				
240-28011-13	1	D	16:09	X	X	X																				
240-28011-14	1	D	16:09	X	X	X																				
240-28011-15	1	D	16:09	X	X	X																				
240-28011-16	1	D	16:09	X	X	X																				
240-28011-17	1	D	16:09	X	X	X																				
240-28011-18	1	D	16:09	X	X	X																				
240-28011-19	1	D	16:09	X	X	X																				
240-28011-20	1	D	16:09	X	X	X																				
240-28011-21	1	D	16:09	X	X	X																				
240-28011-22	1	D	16:09	X	X	X																				
240-28011-23	1	D	16:09	X	X	X																				
240-28011-24	1	D	16:09	X	X	X																				
240-28011-25	1	D	16:09	X	X	X																				
240-28011-26	1	D	16:09	X	X	X																				
240-28011-27	1	D	16:09	X	X	X																				
240-28011-28	1	D	16:09	X	X	X																				
240-28011-29	1	D	16:09	X	X	X																				
240-28011-30	1	D	16:09	X	X	X																				
240-28011-31	1	D	16:09	X	X	X																				
240-28011-32	1	D	16:09	X	X	X																				
240-28011-33	1	D	16:09	X	X	X																				
240-28011-34	1	D	16:09	X	X	X																				
240-28011-35	1	D	16:09	X	X	X																				
240-28011-36	1	D	16:09	X	X	X																				
ZZZZZZ			16:09																							
ZZZZZZ			16:09																							
ZZZZZZ			16:09																							
ZZZZZZ			16:09																							

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-28011-1

SDG No.:

Instrument ID: NOEQUIP Method: SM 2340B

Start Date: 08/16/2013 16:09 End Date: 08/16/2013 16:09

Prep Types
D = Dissolved

APPENDIX C—CHEMICAL RESULTS DATA TABLE

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-081513 20130815	EL-SW01B EL-SW01B-081513 20130815	EL-SW01C EL-SW01C-081513 20130815	EL-SW01D EL-SW01D-081513 20130815	MSA-SW-37A MSA-SW37A- 20130815	MSA-SW-37B MSA-SW37B- 20130815	MSA-SW-37C MSA-SW37C- 20130815	MSA-SW-37D MSA-SW37D- 20130815
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	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	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	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	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	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	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	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	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	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.2 J	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	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.15 J	0.12 J	0.12 U	0.3 J	0.44 J	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	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	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	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	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	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	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	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	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	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	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	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	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	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	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	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	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	1.5 B	2.1 B
BENZENE	0.24 J	0.21 J	0.13 U	0.4 J	0.5 J	0.18 J	0.16 J	0.15 J
BROMOBENZENE	0.13 U	0.13 U	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	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	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	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	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	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	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	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	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	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	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	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.33 J	0.17 U	0.29 J	0.22 J	0.17 U	0.3 J	0.28 J	0.28 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	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	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	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	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	EL-SW01A EL-SW01A-081513 20130815	EL-SW01B EL-SW01B-081513 20130815	EL-SW01C EL-SW01C-081513 20130815	EL-SW01D EL-SW01D-081513 20130815	MSA-SW-37A MSA-SW37A- 20130815	MSA-SW-37B MSA-SW37B- 20130815	MSA-SW-37C MSA-SW37C- 20130815	MSA-SW-37D MSA-SW37D- 20130815
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.19 J	0.25 J	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	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	0.13 U	0.13 U
M+P-XYLENES	0.29 J	0.24 U	0.24 U	0.58 J	0.84 J	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	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	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 J	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	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	0.14 U	0.14 U
O-XYLENE	0.17 J	0.14 U	0.14 U	0.31 J	0.44 J	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	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	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	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.66 J	0.5 J	0.13 U	1.3	1.7	0.2 J	0.13 U	0.13 U
TOTAL XYLENES	0.46 J	0.14 U	0.14 U	0.89 J	1.3 J	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	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	0.19 U	0.19 U
TRICHLOROETHENE	0.6 J	0.6 J	0.55 J	0.37 J	0.44 J	0.51 J	0.48 J	0.44 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
DISSOLVED METALS (UG/L)								
ANTIMONY	NA	NA	NA	NA	0.34 B	0.35 B	0.36 B	0.36 B
ARSENIC	NA	NA	NA	NA	1.7 J	1.8 J	1.9 J	1.9 J
BARIUM	NA	NA	NA	NA	16	15	17	16
BERYLLIUM	NA	NA	NA	NA	0.13 B	0.087 B	0.079 B	0.068 B
CADMIUM	NA	NA	NA	NA	0.037 B	0.026 U	0.026 U	0.026 U
CHROMIUM	NA	NA	NA	NA	0.24 J	0.23 J	0.34 J	0.4 J
COBALT	NA	NA	NA	NA	0.12 B	0.078 B	0.079 B	0.067 B
COPPER	NA	NA	NA	NA	4.2 B	3.9 B	4.5 B	4.7 B
LEAD	NA	NA	NA	NA	0.2 J	0.17 J	0.17 J	0.14 J
MERCURY	NA	NA	NA	NA	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	NA	NA	NA	NA	1.5 J	1.5 J	1.6 J	1.6 J
NICKEL	NA	NA	NA	NA	1.6 J	1.3 J	1.5 J	1.4 J
SELENIUM	NA	NA	NA	NA	0.47 J	0.34 U	0.49 J	0.4 J
SILVER	NA	NA	NA	NA	0.01 B	0.01 B	0.011 B	0.009 B
THALLIUM	NA	NA	NA	NA	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	NA	NA	NA	NA	0.1 B	0.1 B	0.12 B	0.11 B
VANADIUM	NA	NA	NA	NA	1.6 J	1.8 J	2.1 J	2 J
ZINC	NA	NA	NA	NA	8 B	2.1 U	2.5 B	3.1 B
MISCELLANEOUS PARAMETERS (UG/L)								
HEXAVALENT CHROMIUM	NA	NA	NA	NA	0.06 L	0.06 L	0.063 L	0.056 L
MISCELLANEOUS PARAMETERS (MG/L)								
CALCIUM HARDNESS AS CACO3	NA	NA	NA	NA	68	70	76	73
HARDNESS AS CACO3	NA	NA	NA	NA	250	250	280	260
MAGNESIUM HARDNESS AS CACO3	NA	NA	NA	NA	180	180	200	190

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-38A	MSA-SW-38B	MSA-SW-38C	MSA-SW-38D	MSA-SW-39A	MSA-SW-39B	MSA-SW-39C	MSA-SW-39D
SAMPLE ID	MSA-SW38A-20130815	MSA-SW38B-20130815	MSA-SW38C-20130815	MSA-SW38D-20130815	MSA-SW39A-20130815	MSA-SW39B-20130815	MSA-SW39C-20130815	MSA-SW39D-20130815
SAMPLE DATE								
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	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	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	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	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	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	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	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	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	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	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	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.24 J	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	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	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	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	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	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	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	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	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	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 J	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	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	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	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	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	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	0.32 U	0.32 U
ACETONE	1.1 U	1.1 U	1.1 U	4 B	1.1 U	1.1 U	1.1 U	1.1 U
BENZENE	0.24 J	0.14 J	0.14 J	0.32 J	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	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	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	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	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	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.21 J	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	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	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	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	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	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	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	1.4	0.88 J	0.73 J	0.57 J	0.17 U	0.69 J	0.5 J	0.76 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	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	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	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	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-38A MSA-SW38A-20130815	MSA-SW-38B MSA-SW38B-20130815	MSA-SW-38C MSA-SW38C-20130815	MSA-SW-38D MSA-SW38D-20130815	MSA-SW-39A MSA-SW39A-20130815	MSA-SW-39B MSA-SW39B-20130815	MSA-SW-39C MSA-SW39C-20130815	MSA-SW-39D MSA-SW39D-20130815
ETHYLBENZENE	0.17 U	0.17 U	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	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.54 J	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	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	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	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	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.27 J	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	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	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	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.36 J	0.13 U	0.13 U	1.1	0.13 U	0.13 U	0.13 U	0.13 J
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.81 J	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	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	0.19 U	0.19 U
TRICHLOROETHENE	1.6	2	1.4	1.7	0.3 J	1.6	1.1	1.5
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	3.2	0.47 J	0.39 J	0.31 J	0.22 U	0.37 J	0.25 J	0.38 J
DISSOLVED METALS (UG/L)								
ANTIMONY	0.36 B	0.35 B	0.36 B	0.32 B	0.29 B	0.29 B	0.3 B	0.32 B
ARSENIC	1.8 J	1.8 J	1.8 J	1.8 J	1.5 J	1.4 J	1.6 J	1.7 J
BARIUM	15	16	16	16	17	16	16	19
BERYLLIUM	0.06 B	0.058 B	0.074 B	0.064 B	0.031 U	0.034 B	0.031 U	0.031 B
CADMIUM	0.029 B	0.032 B	0.043 B	0.05 B	0.029 B	0.026 U	0.041 B	0.039 B
CHROMIUM	0.26 J	0.85 J	0.3 J	0.2 J	0.22 J	0.27 J	0.22 J	0.21 J
COBALT	0.088 B	0.078 B	0.1 B	0.073 B	0.11 B	0.1 B	0.068 B	0.08 B
COPPER	4 B	4.3 B	4.3 B	4.4 B	3.8 B	3.8 B	4 B	4.4 B
LEAD	0.14 U	0.14 U	0.19 J	0.14 U	0.19 J	0.19 J	0.14 U	0.14 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.5 J	1.6 J	1.6 J	1.6 J	1.4 J	1.4 J	1.6 J	1.7 J
NICKEL	1.3 J	1.6 J	1.4 J	1.4 J	1.3 J	1.3 J	1.6 J	1.5 J
SELENIUM	0.34 U	0.61 J	0.34 U	0.36 J	0.34 J	0.34 U	0.44 J	0.44 J
SILVER	0.011 B	0.01 B	0.017 B	0.009 B	0.01 B	0.0083 U	0.0083 U	0.012 B
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.089 B	0.093 B	0.12 B	0.11 B	0.083 B	0.079 B	0.081 B	0.097 B
VANADIUM	1.9 J	1.9 J	1.9 J	2 J	1.9 J	1.9 J	1.9 J	2.1 J
ZINC	3.1 B	2.6 B	5.1 B	3.4 B	2.1 U	2.1 B	7.6 B	2.1 U
MISCELLANEOUS PARAMETERS (UG/L)								
HEXAVALENT CHROMIUM	0.073 L	0.101 L	0.06 L	0.055 L	0.04 UL	0.07 L	0.068 L	0.079 L
MISCELLANEOUS PARAMETERS (MG/L)								
CALCIUM HARDNESS AS CACO3	70	70	73	73	70	68	72	80
HARDNESS AS CACO3	250	250	260	270	270	250	270	290
MAGNESIUM HARDNESS AS CACO3	180	180	190	190	200	180	190	220

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-40A MSA-SW40A-20130815	MSA-SW-40B MSA-SW40B-20130815	MSA-SW-40C MSA-SW40C-20130815	MSA-SW-40D MSA-SW40D-20130815	MSA-SW-41A MSA-SW41A-20130815	MSA-SW-41B MSA-SW41B-20130815	MSA-SW-41C MSA-SW41C-20130815	MSA-SW-41D MSA-SW41D-20130815
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	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	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	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	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	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	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	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	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	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.21 J	0.0059 U	0.16 J	0.0059 U	0.22 J	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	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.49 J	0.12 U	0.38 J	0.12 U	0.51 J	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	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	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	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	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	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	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	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	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	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	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 UR	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	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	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	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	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	0.32 U	0.32 U
ACETONE	1.3 B	1.1 U	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	0.51 J	0.22 J	0.42 J	0.18 J	0.42 J	0.14 J
BROMOBENZENE	0.13 U	0.13 U	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	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	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	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	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	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	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	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	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	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	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	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.97 J	0.37 J	0.17 U	0.26 J	1.8	0.47 J	0.17 U	0.39 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	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	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	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	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-40A MSA-SW40A-20130815	MSA-SW-40B MSA-SW40B-20130815	MSA-SW-40C MSA-SW40C-20130815	MSA-SW-40D MSA-SW40D-20130815	MSA-SW-41A MSA-SW41A-20130815	MSA-SW-41B MSA-SW41B-20130815	MSA-SW-41C MSA-SW41C-20130815	MSA-SW-41D MSA-SW41D-20130815
ETHYLBENZENE	0.17 U	0.17 U	0.26 J	0.17 U	0.2 J	0.17 U	0.22 J	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.94 J	0.24 U	0.7 J	0.24 U	0.8 J	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	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	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	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	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.48 J	0.14 U	0.35 J	0.14 U	0.42 J	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	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	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	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	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	1.9	0.29 J	1.3	0.29 J	1.6	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	1.4 J	0.14 U	1.1 J	0.14 U	1.2 J	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	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	0.19 U	0.19 U
TRICHLOROETHENE	0.41 J	0.51 J	0.48 J	0.44 J	3.2	0.78 J	0.61 J	0.75 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	1.5	0.31 J	0.22 J	0.22 U	1.1	0.3 J	0.23 J	0.28 J
DISSOLVED METALS (UG/L)								
ANTIMONY	0.35 B	0.58 B	0.37 B	0.35 B	0.33 B	0.34 B	0.3 B	0.31 B
ARSENIC	1.7 J	2.1 J	1.7 J	1.8 J	1.8 J	1.6 J	1.5 J	1.5 J
BARIUM	15	16	15	16	15	16	16	16
BERYLLIUM	0.092 B	0.47 B	0.2 B	0.15 B	0.13 B	0.085 B	0.092 B	0.057 B
CADMIUM	0.048 B	0.46 J	0.066 B	0.03 B	0.044 B	0.037 B	0.032 B	0.026 B
CHROMIUM	0.19 B	0.76 B	0.21 B	0.2 B	0.36 B	0.18 B	0.22 B	0.23 B
COBALT	0.1 B	0.53 J	0.11 B	0.081 B	0.16 B	0.073 B	0.061 B	0.061 B
COPPER	4 B	4.4 B	4 B	4.4 B	4.8	4 B	4.1 B	4.1 B
LEAD	0.19 J	0.77 J	0.21 J	0.16 J	0.2 J	0.14 U	0.14 U	0.14 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.5 J	1.6 J	1.6 J	1.6 J	1.6 J	1.6 J	1.5 J	1.5 J
NICKEL	1.3 J	1.8 J	1.4 J	1.5 J	1.5 J	1.6 J	1.3 J	1.4 J
SELENIUM	0.35 J	1.1 J	0.34 U	0.51 J	0.48 J	0.34 U	0.37 J	0.36 J
SILVER	0.018 B	0.058 B	0.014 B	0.014 B	0.012 B	0.011 B	0.013 B	0.016 B
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.15 B	0.35 B	0.15 B	0.12 B	0.1 B	0.11 B	0.089 B	0.088 B
VANADIUM	1.6 J	2.1 J	1.8 J	2 J	2 J	1.9 J	1.9 J	1.8 J
ZINC	2.1 U	3.7 B	2.1 U	2.1 U	3.7 B	3.2 B	8.9 B	3 B
MISCELLANEOUS PARAMETERS (UG/L)								
HEXAVALENT CHROMIUM	0.087 L	0.077 L	0.049 L	0.063 L	0.107 L	0.067 L	0.071 L	0.053 L
MISCELLANEOUS PARAMETERS (MG/L)								
CALCIUM HARDNESS AS CACO3	68	70	70	71	70	72	71	71
HARDNESS AS CACO3	250	250	250	260	250	260	260	260
MAGNESIUM HARDNESS AS CACO3	180	180	180	190	180	190	190	190

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-42A	MSA-SW-42B	MSA-SW-42C	MSA-SW-42D	MSA-SW-43A	MSA-SW-43B	MSA-SW-43C	MSA-SW-43D
SAMPLE ID	MSA-SW42A-20130815	MSA-SW42B-20130815	MSA-SW42C-20130815	MSA-SW42D-20130815	MSA-SW43A-20130815	MSA-SW43B-20130815	MSA-SW43C-20130815	MSA-SW43D-20130815
SAMPLE DATE								
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	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	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	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	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	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	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	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	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	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.14 J	0.0059 U	0.0059 U	0.0059 U	0.25 J
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.29 J	0.12 U	0.12 U	0.33 J	0.12 U	0.12 U	0.3 J	0.64 J
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	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	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	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	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	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	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	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	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	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	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	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	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	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	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	0.32 U	0.32 U
ACETONE	2.7 B	1.1 U	1.1 U	2.3 B	1.1 U	1.1 U	1.1 U	1.1 U
BENZENE	0.42 J	0.13 J	0.15 J	0.46 J	0.21 J	0.19 J	0.43 J	0.62 J
BROMOBENZENE	0.13 U	0.13 U	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	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	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	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	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	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	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	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	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	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	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	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	1.5	0.17 U	0.41 J	0.17 U	3.4	0.54 J	0.39 J	0.44 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	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	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	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	0.11 U	0.11 U

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Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-42A MSA-SW42A-20130815	MSA-SW-42B MSA-SW42B-20130815	MSA-SW-42C MSA-SW42C-20130815	MSA-SW-42D MSA-SW42D-20130815	MSA-SW-43A MSA-SW43A-20130815	MSA-SW-43B MSA-SW43B-20130815	MSA-SW-43C MSA-SW43C-20130815	MSA-SW-43D MSA-SW43D-20130815
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.2 J	0.17 U	0.17 U	0.17 J	0.31 J
HEXACHLOROBUTADIENE	0.3 U	0.3 U	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	0.13 U	0.13 U
M+P-XYLENES	0.55 J	0.24 U	0.24 U	0.72 J	0.24 U	0.24 U	0.67 J	1.1 J
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	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	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	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	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	0.14 U	0.14 U
O-XYLENE	0.29 J	0.14 U	0.14 U	0.38 J	0.14 U	0.14 U	0.32 J	0.56 J
SEC-BUTYLBENZENE	0.13 U	0.13 U	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	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	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	1.2	0.13 U	0.13 U	1.6	0.28 J	0.3 J	1.3	2.2
TOTAL XYLENES	0.84 J	0.14 U	0.14 U	1.1 J	0.14 U	0.14 U	0.99 J	1.7 J
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	0.44 J	0.45 J	0.57 J	0.48 J	4.9	0.93 J	0.7 J	0.75 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	2.6	0.31 J	0.29 J	0.22 U	1.1	0.38 J	0.29 J	0.3 J
DISSOLVED METALS (UG/L)								
ANTIMONY	0.32 B	0.31 B	0.33 B	0.3 B	0.33 B	0.33 B	0.31 B	0.31 B
ARSENIC	1.7 J	1.7 J	1.8 J	1.8 J	1.8 J	1.8 J	1.6 J	1.6 J
BARIUM	15	15	15	15	16	17	16	17
BERYLLIUM	0.07 B	0.048 B	0.058 B	0.051 B	0.039 B	0.037 B	0.031 U	0.031 U
CADMIUM	0.026 U	0.026 U	0.026 U	0.026 U	0.05 B	0.031 B	0.026 U	0.031 B
CHROMIUM	0.22 B	0.19 B	0.19 B	0.19 B	0.25 B	0.33 B	0.19 B	0.2 B
COBALT	0.1 B	0.067 B	0.056 B	0.067 B	0.12 B	0.13 B	0.061 B	0.077 B
COPPER	4.2 B	5.1	32	4.4 B	4.6	4.6	4.2 B	4.2 B
LEAD	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.26 J	0.14 U	0.14 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.5 J	1.5 J	1.5 J	1.5 J	1.6 J	1.6 J	1.5 J	1.6 J
NICKEL	1.2 J	1.2 J	1.3 J	1.6 J	1.4 J	1.7 J	1.2 J	1.5 J
SELENIUM	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.41 J	0.34 U	0.43 J
SILVER	0.009 B	0.012 B	0.029 B	0.011 B	0.011 B	0.011 B	0.009 B	0.0083 U
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.096 B	0.083 B	0.085 B	0.11 B	0.11 B	0.077 B	0.075 B	0.069 B
VANADIUM	1.8 J	1.9 J	2 J	2.1 J	2 J	2.1 J	1.9 J	2.1 J
ZINC	2.1 U	6.1 B	24 B	4.2 B	17 B	4.2 B	6.9 B	2.1 B
MISCELLANEOUS PARAMETERS (UG/L)								
HEXAVALENT CHROMIUM	0.07 L	0.058 L	0.096 L	0.095 L	0.072 L	0.075 L	0.056 L	0.105 L
MISCELLANEOUS PARAMETERS (MG/L)								
CALCIUM HARDNESS AS CACO3	66	67	70	70	72	73	70	75
HARDNESS AS CACO3	240	240	250	250	260	270	260	280
MAGNESIUM HARDNESS AS CACO3	170	180	180	180	190	190	190	200

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-44A	MSA-SW-44B	MSA-SW-44C	MSA-SW-44D	MSA-SW-45A	MSA-SW-45B	MSA-SW-45C	MSA-SW-45D
SAMPLE ID	MSA-SW44A-20130815	MSA-SW44B-20130815	MSA-SW44C-20130815	MSA-SW44D-20130815	MSA-SW45A-20130815	MSA-SW45B-20130815	MSA-SW45C-20130815	MSA-SW45D-20130815
SAMPLE DATE								
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	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	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	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	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	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	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	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	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	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.26 J	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	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.57 J	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	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	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	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	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	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	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	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	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	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	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	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	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	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	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	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	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	1.1 U	1.1 U
BENZENE	0.15 J	0.13 J	0.19 J	0.15 J	0.66 J	0.16 J	0.14 J	0.13 U
BROMOBENZENE	0.13 U	0.13 U	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	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	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	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	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	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	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	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	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	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	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	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	1	0.75 J	0.77 J	0.5 J	1.2	0.66 J	0.17 U	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	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	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	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	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	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	MSA-SW-44A MSA-SW44A-20130815	MSA-SW-44B MSA-SW44B-20130815	MSA-SW-44C MSA-SW44C-20130815	MSA-SW-44D MSA-SW44D-20130815	MSA-SW-45A MSA-SW45A-20130815	MSA-SW-45B MSA-SW45B-20130815	MSA-SW-45C MSA-SW45C-20130815	MSA-SW-45D MSA-SW45D-20130815
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.33 J	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	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U	1.1 J	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	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	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U	0.3 J	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	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U	0.59 J	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	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	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	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	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	0.28 J	0.13 U	2.5	0.13 U	0.13 U	0.13 U
TOTAL XYLENES	0.14 U	0.14 U	0.14 U	0.14 U	1.7 J	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	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	0.19 U	0.19 U
TRICHLOROETHENE	1.8	1.4	1.5	1	2.5	1.3	0.84 J	0.71 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.51	0.46 J	0.43 J	0.33 J	0.61	0.34 J	0.22 U	0.22 U
DISSOLVED METALS (UG/L)								
ANTIMONY	0.3 B	0.31 B	0.3 B	0.53 B	0.56 B	0.32 B	0.28 B	0.28 B
ARSENIC	1.6 J	1.5 J	1.6 J	2 J	1.9 J	1.4 J	1.4 J	1.4 J
BARIUM	16	16	16	19	17	17	17	17
BERYLLIUM	0.031 U	0.031 U	0.043 B	0.34 B	0.38 B	0.23 B	0.13 B	0.1 B
CADMIUM	0.034 B	0.039 B	0.027 B	0.47 J	0.3 B	0.042 B	0.037 B	0.033 B
CHROMIUM	0.2 B	0.2 B	0.19 B	0.75 J	0.48 J	0.55 J	0.23 J	0.2 J
COBALT	0.2 B	0.073 B	0.061 B	0.54 J	0.4 B	0.085 B	0.16 B	0.13 B
COPPER	4.2 B	4.1 B	3.8 B	4.8 B	5 B	4.4 B	4 B	3.9 B
LEAD	0.14 U	0.14 U	0.14 U	0.75 J	0.6 J	0.16 J	0.17 J	0.14 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	1.6 J	1.5 J	1.6 J	1.8 J	1.6 J	1.5 J	1.5 J	1.5 J
NICKEL	1.6 J	1.3 J	1.2 J	1.9 J	1.9 J	1.6 J	3.3	3.1
SELENIUM	0.38 J	0.34 U	0.43 J	0.94 J	0.91 J	0.38 J	0.47 J	0.49 J
SILVER	0.0083 U	0.014 B	0.009 B	0.045 B	0.035 B	0.025 B	0.01 B	0.01 B
THALLIUM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TUNGSTEN	0.075 B	0.12 B	0.085 B	0.36 B	0.33 B	0.11 B	0.092 B	0.084 B
VANADIUM	2 J	1.9 J	2 J	2.4 B	2.1 B	1.7 B	1.8 B	1.9 B
ZINC	2.8 B	3.5 B	2.1 U	2.5 B	3.4 B	6.7 B	4.9 B	3.6 B
MISCELLANEOUS PARAMETERS (UG/L)								
HEXAVALENT CHROMIUM	0.073 L	0.071 L	0.052 L	0.062 L	0.088 L	0.079 L	0.109 L	0.059 L
MISCELLANEOUS PARAMETERS (MG/L)								
CALCIUM HARDNESS AS CACO3	72	72	71	80	71	72	73	74
HARDNESS AS CACO3	260	260	260	300	260	270	270	270
MAGNESIUM HARDNESS AS CACO3	190	190	190	220	190	190	200	200

Table C-1

Chemical Results for Surface Water Samples-August 2013
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

B - Result considered to be from laboratory blank contamination based on USEPA 5 times or 10 times rule.
$CaCO_3$ = calcium carbonate
EL - Edwards Lane
J - Positive result is considered estimated as a result of technical noncompliance.
L - result is biased low. Actual result may be higher.
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 - The result is considered qualitatively or quantitatively unreliable.