Lockheed Martin
Corporation 6801
Rockledge Drive
MP CCT 246
Bethesda, MD 20817
Telephone (301) 548-2223

LOCKHEED MARTIN

January 29, 2020 **VIA OVERNIGHT CARRIER**

Mr. Brian Dietz
Program Administrator Land Restoration Program
Land and Material Administration Maryland Department of the Environment
1800 Washington Road, Suite 625
Baltimore, Maryland 21230

Re: Transmittal of the Technical Memorandum; August 2019 Surface Water Sampling Results for Frog Mortar Creek
Martin State Airport, 701 Wilson Point Road, Middle River,Maryland

Dear Mr. Dietz:

For your information, please find enclosed two hard copies with CDs of the above-referenced document. This technical memorandum presents sampling results for surface water samples collected in Frog Mortar Creek adjacent to the Dump Road Area at Martin State Airport in Middle River, Maryland. If you have any questions or require any additional information please contact me by phone at 301-548-2223, or via e-mail at charles.trione@lmco.com.

Sincerely,

Charles Trione
Project Lead, Environmental
Remediation Lockheed Martin
Corporation

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

cc: (via mail with CD enclosure)
Pete Lekas, EA Environmental

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

cc: (via Secure Information Exchange)
Jann Richardson, Lockheed Martin

TECHNICAL MEMORANDUM: AUGUST 2019 SURFACE WATER SAMPLING RESULTS FOR FROG MORTAR CREEK MARTIN STATE AIRPORT 701 WILSON POINT ROAD MIDDLE RIVER, MARYLAND

Prepared for:
Lockheed Martin Corporation

Prepared by:
Tetra Tech, Inc.

January 2020

Approved by:
Lockheed Martin, Inc.

Revision: 0

Michael Martin, P.G.
Regional Manager

Josh Mullis
Project Scientist

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ACRONYMS AND ABBREVIATIONS

AWQC	ambient water quality criteria
BTAG	Biological Technical Advisory Group
BLM	biotic ligand model
BTEX	benzene, toluene, ethylbenzene, and xylenes
cis-1,2-DCE	*cis*-1,2-dichloroethene
COMAR	Code of Maryland Regulations
cVOC	chlorinated volatile organic compound
DOC	dissolved organic carbon
DRA	Dump Road Area
EESH	energy, environment, safety and health
EL	Edwards Lane
ESWS	ecological surface-water screening level
GIS	geographic information system
IDW	investigation derived waste
Lockheed Martin	Lockheed Martin Corporation
MAA	Maryland Aviation Administration
MDE	Maryland Department of the Environment
MDANG	Maryland Air National Guard
mg/L	milligram(s) per liter
MSA	Martin State Airport
µg/L	microgram(s) per liter
NOAA	National Oceanic and Atmospheric Administration
NRWQC	national recommended water quality criteria
PDF	portable document format
PPE	personal protective equipment
SVOC	semivolatile organic compound

TB	trip blank
TCE	trichloroethene
Tetra Tech	Tetra Tech, Inc.
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

SECTION 1
INTRODUCTION

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this technical memorandum presenting sampling results for surface water samples collected in Frog Mortar Creek adjacent to the Dump Road Area (DRA) at Martin State Airport (MSA) in Middle River, Maryland (see Figure 1-1). Surface water was sampled according to the *2019 Surface Water Sampling Work Plan* (Tetra Tech, 2019a). This technical memorandum presents the analytical results for surface water samples collected from Frog Mortar Creek on August 8, 2019.

This investigation obtained additional chemical and spatial-distribution data for volatile organic compounds (VOCs) and metals in creek surface water that might emanate from a groundwater plume at the Dump Road Area of Martin State Airport, and chemical and spatial-distribution data for volatile organic compounds possibly originating from upgradient sources. Results herein are compared to screening levels intended to protect human health and the environment. These data will provide information to:

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

This technical memorandum is organized as follows:

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

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

Section 4—Results: Presents the investigation results.

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

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

SECTION 2
SITE BACKGROUND AND PREVIOUS INVESTIGATIONS

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland, bounded by Frog Mortar Creek to the east and Stansbury Creek to the west (Figure 2-1); both are tidal tributaries of the Chesapeake Bay. The Maryland Aviation Administration (MAA) currently operates MSA on behalf of the Maryland Department of Transportation. The current MSA property (approximately 775 acres) consists of an administration building (the Main Terminal building), aircraft hangars, a 7,000-foot-long runway, and several taxiways. MAA manages more than 130,000 square feet of heated hangar space and 190 smaller aircraft hangars. MSA hosts the Maryland State Police aviation unit, Baltimore County Police aviation and marine units, the Baltimore City Police aviation unit, and the Glenn L. Martin Museum. A portion of MSA is leased to the United States Air Force for use by the Maryland Air National Guard (MDANG). MSA is also home to several commercial tenants that provide fuels and lubricants, helicopter avionics repair, and flight instruction (MAA, 2018).

The area under investigation is Frog Mortar Creek, which is east of and adjacent to the Dump Road Area (DRA) site at MSA (Figures 2-1 and 2-2). The DRA currently consists mostly of open meadows, mowed grass, and heavily wooded areas (as modified by the construction of the extraction and treatment system noted below); however, it also includes a portion of Taxiway Tango and extends to the airport runway. Taxiway Tango is a concrete and asphalt taxiway currently used by MDANG for military aircraft operations. The airport runway is also used by state-owned and private aircraft.

An extraction and treatment system for DRA groundwater was constructed in 2017 and is currently operational at the DRA site. This extraction and treatment system consists of 16 groundwater extraction wells, underground piping, and a building that houses components to treat groundwater containing volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and

metals detected at concentrations above Maryland Department of the Environment (MDE) groundwater standards. The wells and underground piping pump groundwater from the surficial aquifer to the aboveground treatment building, creating a "hydraulic barrier" that captures groundwater and prevents such contaminants from migrating off-site. The treatment building is 60-feet-wide and 170-feet-long (10,200 square feet) and is near Frog Mortar Creek in the eastern-central portion of the DRA (Figure 2-2). Treated groundwater is tested routinely and subsequently discharged to Frog Mortar Creek via an MDE-permitted outfall.

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

- ***chlorinated VOCs*** (cVOCs)—including trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC)
- ***petroleum-related VOCs***—such as benzene, toluene, ethylbenzene, and xylenes (BTEX)
- ***1,4-dioxane***—Maryland does not have a groundwater standard for this compound, but concentrations at the site have exceeded standards proposed or promulgated by other states.
- ***metals***—arsenic, barium, beryllium, cadmium, chromium, copper, hexavalent chromium (in two wells, in 2008 only), iron, lead, manganese, mercury, nickel, selenium, thallium, vanadium, and zinc

Frog Mortar Creek is hydraulically downgradient of and receives groundwater discharging from the DRA. The constituents listed above have been detected in surface water samples collected from Frog Mortar Creek. Surface water samples have been collected from Frog Mortar Creek since 1997, and multiple rounds of samples have been collected annually since 2010. Studies at Frog Mortar Creek from 1997–2017, and details of the area's physical setting, land use, physiography, and surface/subsurface conditions (i.e., soils, hydrology, and geology), are summarized in the *2018 Surface Water Sampling Report for Frog Mortar Creek* (Tetra Tech, 2019b), and therefore are not repeated herein.

SECTION 3
INVESTIGATION APPROACH AND METHODOLOGY

Previous surface-water sampling data for Frog Mortar Creek support the need for ongoing monitoring to assess the extent to which surface water is affected by groundwater discharged from the Dump Road Area (DRA). The August 2019 data will support this ongoing effort and will also be used to assess the effectiveness of the extraction, containment, and treatment system. The chlorinated volatile organic compounds (cVOCs) trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC), and several metals, have previously been detected in Frog Mortar Creek surface water samples at concentrations exceeding ecological and/or human health screening-criteria; these analytes have also been detected in groundwater at the DRA.

Detected chemical concentrations in surface water obtained from Frog Mortar Creek were evaluated by comparing them to United States Environmental Protection Agency (USEPA) or Maryland screening levels and site-specific screening levels. These screening criteria include USEPA national recommended water quality criteria (NRWQC), Maryland ambient water quality criteria (AWQC), USEPA Biological Technical Advisory Group (BTAG) surface water screening-benchmarks, and site-specific screening levels for swimming developed by Lockheed Martin Corporation (Lockheed Martin). The August 2019 sampling is the fourth of six surface-water sampling rounds planned for 2019. The August sampling round assessed water quality during the summer season, when a high amount of surface water recreational use would be expected in Frog Mortar Creek.

3.1 SURFACE WATER SAMPLING

3.1.1 Surface Water Sampling and Chemical Analyses

Forty-four surface water samples were collected from Frog Mortar Creek adjacent to the DRA site on August 8, 2019. 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 the creek;

these transects are designated MSA-SW37, MSA-SW38, MSA-SW39, MSA-SW40, MSA-SW41, MSA-SW42, MSA-SW43, MSA-SW44, and MSA-SW45.

Four samples were also collected along a transect extending out from the eastern shoreline of the creek at 3301 Edwards Lane (EL); this transect is designated EL-SW01 (see Figure 3-1). Four additional near-shore samples were collected between transects MSA-SW42 and MSA-SW40 (MSA-SW46A), MSA-SW40 and MSA-SW38 (MSA-SW47A), MSA-SW38 and MSA-SW41 (MSA-SW48A), and MSA-SW41 and MSA-SW43 (MSA-SW49A). These four locations were first sampled in July 2015 to assess constituent concentrations between transects exhibiting the highest VOC concentrations, and were also included in the August 2019 sampling round.

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

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

- VOCs, by SW846 Method 8260C
  (including Freon 113 [1,1,2-trichloro-1,2,2-trifluoroethane],
  Freon 22 [chlorodifluoromethane], and tentatively identified compounds)
- dissolved metals (filtered in the field), by SW846 Methods 6020/7470A
- hardness, by Standard Method SM 2340B
- hexavalent chromium, by USEPA Method 218.6
- dissolved organic carbon (DOC), by USEPA Method 9060; collected at all "B" transect locations

The last bullet (above) describes newly added samples first added in June 2019 and continued in the July 2019 round, collected at the "B" locations within each transect (including the Edwards

Lane transect). These samples provide the DOC data required to run the biotic ligand model (BLM), which is used to calculate the (aquatic life freshwater) screening level for copper.

Historically, concentrations of metals (other than arsenic and barium) above screening criteria have been found predominantly in areas adjacent to or near the western shoreline. Additionally, metal concentrations (except barium) in eastern shoreline-transect samples (i.e., EL-SW01A–D) collected in 2012 were less than the screening criteria; therefore, the eastern shoreline-transect samples were not analyzed for metals and were analyzed only for VOCs. Hexavalent chromium and total chromium have been detected in DRA groundwater; therefore, all western-shoreline samples except SW46A–SW49A were also analyzed for hexavalent chromium. SW46A–SW49A were sampled for VOCs only, as they were added to the sampling program to target areas between transects exhibiting high VOC concentrations. Water quality parameters (including temperature, pH, specific conductance, salinity, turbidity, dissolved oxygen, and oxidation-reduction potential) were measured and recorded at the time of sampling, as was the water depth at all surface-water sampling locations. Sampling information was documented on sample log sheets (see Appendix A).

Water depth measurements were also obtained from the staff gauge at 3301 Edwards Lane before sampling (0.90 meters [2.95 feet] at 0745 hours) and after sampling (0.90 meters [2.95 feet] at 1124 hours). Mean tidal-flux in the Middle River, Maryland, area is approximately 1.6 feet (National Oceanic and Atmospheric Administration [NOAA], 2015). A 2011 study by Lockheed Martin sought to ascertain the effects of tides and sampling depths on contaminant concentrations in Frog Mortar Creek (Tetra Tech, 2012). The tidal phase relative to the time of sample collection appears to influence the VOC concentrations detected, particularly in the samples collected 50 feet from shore. In general, VOC concentrations in “B-series” samples (collected 50 feet from shore) were greater at low tide than at high tide, irrespective of sampling depth. Therefore, during this sampling round, all samples were collected during low tide.

Samples were collected as grab samples from approximately one foot below the water surface using the direct-fill sampling technique. VOC samples were collected using a stainless steel discrete-interval sampler (also known as a “bacon bomb” sampler). The sampler was lowered to approximately one foot below the water surface, the check valve was engaged to allow the sampler

to fill, the sampler was then brought to the surface, and the water was removed through a valve to fill three laboratory-cleaned, hydrochloric-acid preserved, 40-milliliter sample vials. The discrete-interval sampler was cleaned after each use by rinsing it with distilled water over the creek. No decontamination fluids were collected during this sampling.

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

3.1.2 Documentation

A master site logbook was maintained as an overall record of site field activities. Sample documentation includes completed chain of custody forms and surface-water-specific sample log-sheets. Chain of custody forms are standardized to summarize and document pertinent sample information, such as sample identification and type, matrix, date and time of collection, preservation, and the analysis requested. Sample-custody procedures document sample acquisition and integrity. August 2019 log sheets for surface water samples are in Appendix A. Chain of custody forms and data-validation reports are in Appendix B (on compact disc).

3.1.3 Sample Nomenclature and Handling

Surface water samples collected from transects MSA-SW37 through MSA-SW49A are identified with a unique sample-identification tag. Surface water samples are labeled with an “MSA-SW” prefix, followed by the sample transect number, the profile location (“A,” “B,” “C,” or “D”), and the six-digit sampling date. Similarly, surface water samples collected from Edwards Lane transects are identified with an “EL-SW01” prefix, the profile location (“A,” “B,” “C,” or “D”), and the six-digit sampling date. For example, the surface water sample collected on August 8, 2019

from MSA-SW37A would be labeled "MSA-SW37A-080819." The trip blank was labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-080819).

Sample handling includes field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, and analyses requested. Proper custody procedures were followed throughout all phases of sample collection and handling. Chain of custody protocols were used throughout sample handling to assure the evidentiary integrity of sample containers. These protocols demonstrate that the samples were handled and transferred in a manner that would prevent or detect possible tampering.

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

3.1.4 Equipment Decontamination

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

3.1.5 Waste Management

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

3.2 DATA MANAGEMENT

Laboratory data-handling procedures met the requirements of the laboratory subcontract. All analytical and field data are maintained in project files, including copies of chain of custody forms,

sample log forms, sampling location maps, and documentation of quality assurance and data corrections.

3.2.1 Data Tracking and Control

A cradle-to-grave sample tracking system was used from the beginning to the end of sampling. The field operations leader began and coordinated sample tracking before mobilizing the sampling team to the field. Preprinted sample-container labels generated before fieldwork began were reviewed to ensure that they were accurate and adhered to work plan requirements. The project manager coordinated with the analytical laboratory to ensure that the laboratory was aware of the number and type of samples and analyses that would be submitted.

During field sampling, the field operations leader forwarded the chain of custody to a designated project assistant and to the laboratory. The project assistant confirmed that the chain of custody provided the information required by the work plan. This allowed early detection of errors made in the field so that adjustments could be made before sample analyses.

After successful completion of all requested analyses, the laboratory submitted an electronic deliverable for each sample delivery group. When all electronic deliverables had been received from the laboratory, the project assistant checked the laboratory submittal to determine whether the laboratory had performed all analyses requested. All analyses requested for this project were performed.

3.2.2 Sample Information

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

3.2.3 Project Data Compilation

The analytical laboratory generated an Adobe Acrobat® portable document format (PDF) file of the analytical data package, as well as an electronic database deliverable. The electronic database

was checked against the PDF file provided by the laboratory and updated as required, based on data-qualifier flags applied during data validation. All data, such as units of measure and chemical nomenclature, were corrected as necessary to be consistent with the project database.

3.2.4 Geographic Information System

Data management systems for this investigation consists of a relational database and geographic information system (GIS) to manage environmental information pertaining to Martin State Airport (MSA) housed in the energy, environment, safety and health (EESH) GIS system. The relational database stores chemical, geological, hydrogeological, and other environmental data collected during environmental investigations. The GIS, created from the relational database, contains subsets of the larger data pool. The GIS allows environmental data to be posted onto base maps to graphically represent project information. Compiled sampling, chemical, and positional data from this investigation were incorporated into the EESH GIS system.

3.3 DATA REVIEW

Data from the laboratory were entered into a sample database and evaluated against risk-based criteria. Data were validated (to evaluate data completeness, holding times, calibrations, precision, accuracy, laboratory and field-blank contamination, and detection limits) concurrent with the data evaluation. These reviews were based on USEPA national functional guidelines for both inorganic and organic data review (USEPA, 2017a, b) and the specifics of the analytical methods used. Data from this sampling event consist of chemical results for surface water samples. Data-validation reports and chain of custody forms are in Appendix B (on compact disc) as PDF files. A table with all analytical data for August 2019 Frog Mortar Creek surface water samples, including non-detects, is in Appendix C.

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

J The analyte is considered present in the sample but at an estimated value that may not meet highest accuracy or precision standards. In this program, samples were

qualified with "J" because quantitation was above the method detection limit but below the laboratory reporting-limit.

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

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

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

SECTION 4
RESULTS

4.1 SURFACE WATER DATA AND SCREENING CRITERIA

Validated chemical data from the Frog Mortar Creek surface water samples collected in August 2019 were used to generate a statistical summary table (Table 4-1) and a table summarizing positive detections of chemical analytes (Table 4-2). Samples collected from western transects were analyzed for volatile organic compounds (VOCs) (including fuel-related compounds such as benzene, toluene, ethylbenzene, and xylenes [BTEX] and tentatively identified compounds), dissolved (i.e., filtered) metals, hexavalent chromium, and hardness. Samples from locations SW46A, SW47A, SW48A, and SW49A and the eastern-shoreline-transect samples (e.g., EL-SW01) were analyzed for VOCs only, for the reasons described in Section 3.1.1. Dissolved organic carbon (DOC) was analyzed at "B" locations within each transect, excluding the eastern-shoreline transect. 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 freshwater acute and chronic aquatic-organism exposures, and NRWQC for human health aquatic-organism-consumption (USEPA, 2019)
- Maryland ambient water quality criteria (AWQC) for acute and chronic aquatic-organism exposures, and AWQC for human health aquatic-organism-consumption (Code of Maryland Regulations [COMAR], 2016)
- USEPA 2007 Freshwater biotic ligand model (BLM) v. 3.41.2.45 for acute and chronic dissolved copper (USEPA 2007)
- site-specific screening levels for swimming developed for trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC)

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

BTAG screening levels for arsenic, mercury, molybdenum, selenium, and thallium are based on total metals concentrations. Since only dissolved metals were analyzed during this sampling round, results for these metals, are not directly comparable to BTAG criteria. The NRWQC and BTAG screening values for six dissolved metals (cadmium, chromium, lead, nickel, silver, and zinc) were adjusted using the methodology in the National Recommended Water Quality Criteria (USEPA, 2019) and Region III Biological Technical Advisory Group Freshwater Screening Benchmarks (USEPA, 2006). That method recommends adjusting the criteria for these metals using the lowest site-specific hardness (for each round) if it is less than 400 milligrams per liter (mg/L). If site-specific data indicate a hardness greater than 400 mg/L, the method recommends adjusting the criteria using a hardness of 400 mg/L. The lowest hardness value for August 2019 was 100 mg/L, so the screening levels have been adjusted based on this hardness.

As stated above, USEPA has revised the criterion for screening dissolved copper in freshwater environments; it now requires calculation based on the biotic ligand model (BLM) (USEPA, 2007). The BLM uses temperature, pH, salinity, copper concentrations, hardness concentrations, and dissolved organic carbon (DOC) concentrations to determine the dissolved copper criterion. During each sampling round in Frog Mortar Creek, the water quality parameters of temperature, pH, and salinity were collected at each sampling point. Therefore, BLM-calculated dissolved copper criteria are readily available, by running each data set (36 sample sites; eastern shoreline and near-shore discreet locations do not include metals analysis) and using the geomean of the calculated criterion. To improve the accuracy of the BLM, nine DOC samples were added to the sampling program, and samples for DOC were collected at all "B" transect locations (excluding the Edwards Lane transect).

The new BLM-generated criterion for dissolved copper is compared to copper concentrations detected during the current sampling round in Table 4-2. The resulting modeled criteria (chronic 9.60 µg/L; acute 15.46 µg/L) are more stringent than the previously used NRWQC and BTAG values but did not result in any copper exceedances in August 2019 samples (see Table 4-2). Calculations for average DOC at Frog Mortar Creek, the BLM model output, and the USEPA fact sheet for the 2007 freshwater BLM are in Appendix D.

TCE, *cis*-1,2-DCE, and VC results are also compared to site-specific screening levels developed by Lockheed Martin Corporation (Lockheed Martin) at the request of the Maryland Department of the Environment (MDE); these values are used to assess risks posed to recreational users of Frog Mortar Creek. These screening levels were developed to protect the health of swimmers near the Dump Road Area (DRA) shoreline, assuming that they have long-term exposure to surface water (i.e., assumed four hours of swimming per day, 70 days per year, for 30 years). These swimming criteria are used because they provide the most conservative (i.e., most protective of human health) screening levels for Frog Mortar Creek.

Gray shading in Table 4-2 indicates a result that exceeds one or more of the constituent's surface-water screening criteria. A table summarizing analytical data, including non-detect results and detection limits, is attached as Appendix C.

4.2 SURFACE WATER SAMPLING RESULTS

Two VOCs and 14 metals were detected in the August 2019 surface water samples; their analytical results are summarized below and in Tables 4-1 and 4-2. Table 4-3 and Figure 4-1 compare August 2019 results for TCE, *cis*-1,2-DCE, and VC to results from the previous sampling round (July 2019) and the sampling round from one year ago (August 2018). Since most data discussed herein share the "MSA" prefix, it is dropped when referring to transects or samples (e.g., "SW39" refers to transect MSA-SW39), to improve readability. Any discussion related to samples collected from the Edwards Lane transect (e.g., EL-SW01A) will be similarly identified (i.e., SW01A–SW01D) in the text. In addition, many of the lower VOC detections are estimated (i.e., *J*-qualified); these qualifiers (flags) are also dropped in the following discussion, to improve readability (see Table 4-2 for these details).

4.2.1 Volatile Organic Compounds

The most frequently detected VOC in August 2019 was toluene, which was detected in three of 44 samples. Trichloroethene (TCE), vinyl chloride (VC), and *cis*-1,2-dichloroethene (*cis*-1,2-DCE) were not detected in August 2019, similar to July 2019. In June 2019, TCE and *cis*-1,2-DCE were not detected but vinyl chloride was detected in two samples at low concentrations.

August 2019 cVOC concentrations (see Table 4-3) continue to be lower as compared to previous years. As *cis*-1,2-DCE, TCE, and VC were nondetect, no cVOC exceeds its lowest screening level (i.e., their respective swimming criteria of 300 µg/L, 10 µg/L, and 0.75 µg/L).

In previous sampling, surface water samples from transects SW38, SW40, and SW41 (all on the western shore of Frog Mortar Creek) have typically had the highest TCE concentrations. TCE results from August 2019 are nondetect, as were those from the previous two months (June and July 2019). The highest of the five March 2019 detections of TCE (0.27 µg/L) occurred between transects SW41 and SW43 at the near-shore location SW49A.

As stated earlier, *cis*-1,2-DCE was not detected during the current sampling round (August 2019) or in the previous two sampling rounds (June and July 2019) (see Table 4-1; Figure 4-1). *cis*-1,2-DCE was detected in 30 of 44 samples with a maximum of 2.1 µg/L in March 2019; therefore, a decreasing trend is indicated from March 2019 to August 2019.

When detected in previous rounds, the distributions of TCE, *cis*-1,2-DCE, and VC tend to decrease with increased distance from the shore in the higher concentration transects. This trend was not observed in August 2019, as TCE, *cis*-1,2-DCE, and VC were non-detect.

VC was not detected in the current round (August 2019) or previous round (July 2019) but was detected at a lower frequency (in two of 44 samples) one year ago in the August 2018 round. VC exceeded its lowest (swimming) screening level at three locations during March 2019, but no VC exceedances have been detected since.

The two remaining (and only) VOCs (*m*+*p* xylenes and toluene) detected during the current round (August 2019) were at concentrations less than their respective screening levels.

4.2.2 Metals

Barium is ubiquitous in creek samples and has been detected in (varying) narrow concentration ranges in all samples collected in the creek since its surface water was first analyzed for barium in 2010. Consistent with historical results, dissolved barium concentrations (10 µg/L–13 µg/L) at all sampled locations during this sampling round exceed its lowest screening level (4 µg/L) protective of ecological receptors. The highest barium concentration (13 µg/L) was south to the DRA at

sampling locations SW39D, SW45C, and SW45D. Barium concentrations in August 2019 are slightly higher than those detected last round (range of 6.7 µg/L to 8.2 µg/L in July 2019) and are similar to those detected last year (range of 11 µg/L to 13 µg/L in August 2018).

Arsenic was detected during this round with concentrations ranging from 1.9 µg/L to 2.4 µg/L, with the highest concentrations reported at SW38A, SW42C, and SW42D (Table 4-1). All arsenic detections exceed the human health consumption-of-organism-only criterion (0.14 µg/L). In previous events, arsenic concentrations have been consistently lower than the range of arsenic background concentrations (2.2 µg/L–3.9 µg/L) detected in samples collected as part of Lockheed Martin's larger-scale investigation of Frog Mortar Creek in 2007–2008 (Tetra Tech, 2009). However, the arsenic ranges detected in June 2019 (1.2 µg/L-2.5 µg/L) and July 2019 (2.5-3.4 µg/L) differ from the previous trend and resemble the background concentrations detected in earlier investigations. August 2019 arsenic concentrations range similarly to those detected the previous month in July 2019 and similar to those detected last year in August 2018 (1.2 µg/L–2.4 µg/L).

Twelve other metals (antimony, beryllium, chromium, cobalt, copper, lead, molybdenum, nickel, thallium, tungsten, vanadium, and zinc) were detected at low concentrations in August 2019. No copper concentrations exceeded its lowest screening value, which is the BLM-calculated chronic NRWQC and the ecological surface water screening criterion (both are 9.60 µg/L). All other detected metals concentrations were below their respective screening criteria.

4.2.3 Hexavalent Chromium

Hexavalent chromium has been detected in DRA groundwater, and therefore is included in the surface water monitoring program each sampling round. However, it was not detected in the August 2019 sampling round, nor was it detected in 2018, or in any sampling round this year (March, June, or July). Hexavalent chromium was detected in Frog Mortar Creek surface water samples during one event in 2016 (March), as well as in three events in 2017 (July, August, and September). Intermittent low concentrations of hexavalent chromium were detected in Frog Mortar Creek samples before March 2016, within narrow concentration ranges (e.g., 0.028–0.085 µg/L in March 2015, and 0.12–0.16 µg/L in June 2015). The absence of hexavalent chromium detections in August 2019 is consistent with previous sampling results.

SECTION 5
SUMMARY

The Lockheed Martin Corporation August 2019 Frog Mortar Creek surface-water investigation results are summarized below:

- Surface water samples were collected on August 8, 2019, and chemically analyzed to assess concentrations of chemical constituents in Frog Mortar Creek, and particularly to evaluate creek surface-water quality near the Dump Road Area (DRA). Each sample was collected at approximately one foot below the water surface.

- Samples were collected along each of nine transects spaced approximately 350 feet apart (for 36 samples) along the western shoreline of Frog Mortar Creek, and from one transect along the eastern shoreline (4 samples). Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), one was collected approximately 100 feet from the shoreline ("C" sample), and one was collected approximately 200 feet from the shoreline ("D" sample). In addition to the samples collected along transects, four single-point shoreline samples were collected, including SW46A (between transects SW42 and SW40), SW47A (between transects SW40 and SW38), SW48A (between transects SW38 and SW41), and SW49A (between transects SW41 and SW43).

- Frog Mortar Creek samples collected along the western shoreline were analyzed for volatile organic compounds (VOCs), dissolved (filtered) metals, hexavalent chromium, and hardness. Samples SW46A through SW49A, and those collected along the eastern shoreline, were only analyzed for volatile organic compounds.

- Dissolved organic carbon (DOC) samples were added to the sampling program at all "B" transect locations, excluding the Edwards Lane transect, providing current data that was used as input to the biotic ligand model (BLM), which calculated the screening criterion for copper.

- The data were validated in accordance with the United States Environmental Protection Agency (USEPA) Region III Modifications to the National Functional Guidelines for Data Review (USEPA, 1993, 1994), and the specifics of the analytical methods used.

- Sampling results were screened against (1) United States Environmental Protection Agency Region 3 Biological Technical Advisory Group (BTAG) ecological screening-benchmarks for freshwater; (2) 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; (3) Maryland ambient

water quality criteria (AWQC) for acute and chronic aquatic-organism exposures and for human health aquatic-organism-consumption; (4) site-specific screening levels developed to evaluate risks to recreational swimmers from exposure to the three most frequently detected volatile organic compounds in surface water: trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC); and (5) the 2007 United States Environmental Protection Agency freshwater biotic ligand model (BLM, v. 3.41.2.45) for dissolved copper.

- Volatile organic compounds (*m*+*p* xylenes and toluene) and 14 metals, excluding hexavalent chromium, were detected in the August 2019 surface water samples. Detected concentrations of all volatile organic compounds and most metals (except arsenic and barium) were less than human health consumption-of-organism and ecological screening levels.

- Trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride were not detected during the August 2019 sampling round (see Figure 4-1).

- Trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride were not detected on the eastern shoreline. These results are consistent with previous data indicating that volatile organic compound concentrations in this area of Frog Mortar Creek are below their respective site-specific swimming criteria.

- Dissolved barium exceeded its ecological screening level in all 36 samples collected in August 2019. Historical sampling has demonstrated that barium is ubiquitous in creek samples; the August 2019 concentrations (10 µg/L–13 µg/L) are slightly higher than those detected in July 2019 (6.7 µg/L–8.2 µg/L), and are similar to those detected last year in August 2018 (11 µg/L–13 µg/L).

- Arsenic was detected in all 36 samples in which it was analyzed for during this round, with concentrations ranging from 1.9 µg/L to 2.4 µg/L. These results are similar to the range of typical background arsenic concentrations (2.2 µg/L–3.9 µg/L) established during Lockheed Martin's larger-scale 2007–2008 Frog Mortar Creek investigation, are lower than those detected in July 2019 (2.5 µg/L–3.4 µg/L), and are similar to those detected last year in August 2018 (1.2 µg/L–2.4 µg/L). In previous events, arsenic concentrations have been lower than the range of arsenic background concentrations.

- Twelve other metals (antimony, beryllium, chromium, cobalt, copper, lead, molybdenum, nickel, thallium, tungsten, vanadium, and zinc) were detected at low concentrations in August 2019. No copper concentrations exceeded its lowest screening value, which is the biotic ligand model-calculated chronic National Recommended Water Quality Criteria and the ecological surface water screening criterion (both are 9.60 µg/L). All other detected metals concentrations were below their respective screening criteria.

- All thirty-six copper concentrations were less than the biotic ligand model-calculated chronic national recommended water quality criterion and the ecological surface water

screening criterion (both are 9.60 µg/L), while no copper detections exceeded the model-calculated acute criterion of 15.46 µg/L.

- Dissolved hexavalent chromium was not detected in any sample collected in August 2019. Hexavalent chromium was not detected in any of the six sampling events in 2018 or any of the 2019 events (March, June, and July), but was detected in July, August, and September 2017.

SECTION 6
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FIGURES

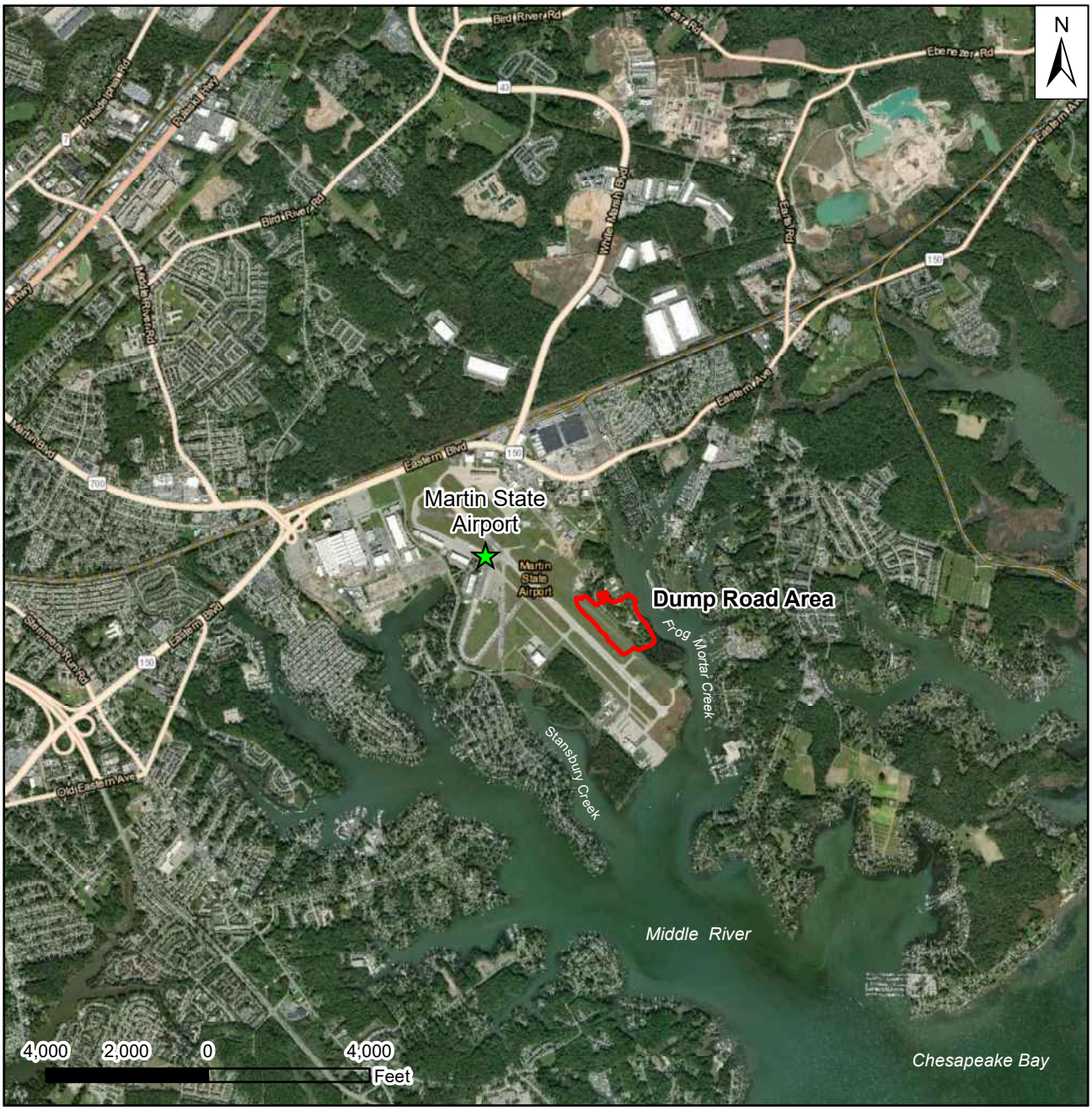
Figure 1-1 Martin State Airport, Dump Road Area and Frog Mortar Creek Location Map

Figure 2-1 Martin State Airport and Surrounding Features

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

Figure 3-1 August 2019 Surface Water Sampling Locations, Frog Mortar Creek

Figure 4-1 Concentrations of Trichloroethene, cis-1,2-Dichloroethene, and Vinyl Chloride along Surface Water Sampling Transects for August 2018, July 2019, and August 2019, Frog Mortar Creek



Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2017 ESRI and its data suppliers).

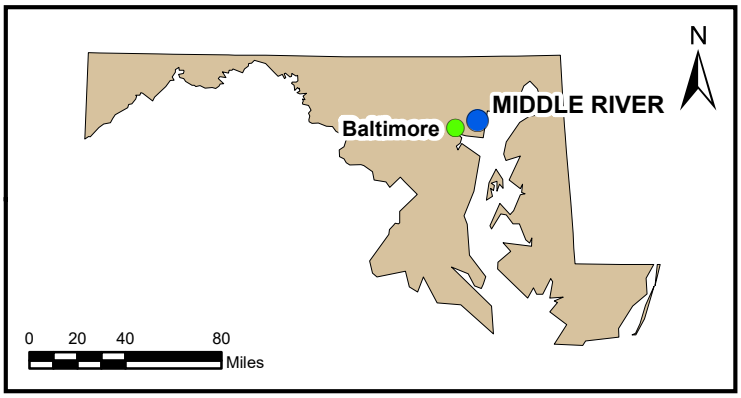


FIGURE 1-1
MARTIN STATE AIRPORT
DUMP ROAD AREA AND FROG MORTAR CREEK LOCATION MAP

Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED: 09/10/18	CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\dra_sitemap_dec2015.mxd)
09/10/18 -- JEE

2017 aerial photograph provided by the State of Maryland.

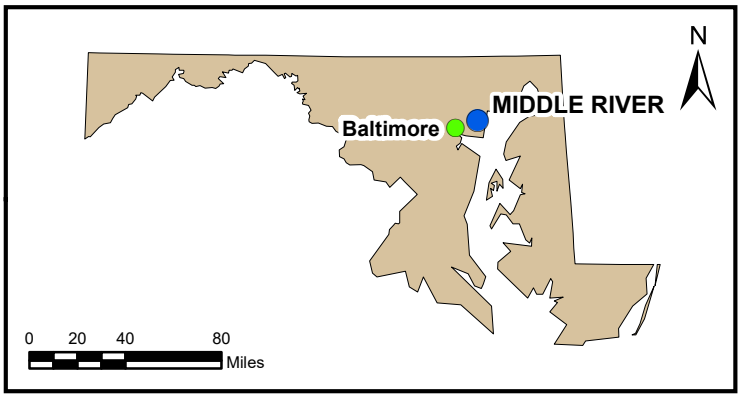


FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED: 09/12/18	CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\msa_sitemap_sep2018.mxd)
09/12/18 -- JEE

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

FIGURE 2-2

SITE FEATURES AND AREAS OF CONCERN DUMP ROAD AREA

LEGEND

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

2017 aerial photograph provided by the State of Maryland.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 09/12/18

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\dra_study_areas_features_sep2018.mxd)
09/12/18 -- JEE

FIGURE 3-1

AUGUST 2019 SURFACE WATER SAMPLING LOCATIONS FROG MORTAR CREEK

LEGEND

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

Samples collected August 8, 2019.
2017 aerial photograph provided by the State of Maryland.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 08/06/19

CREATED BY: JEE

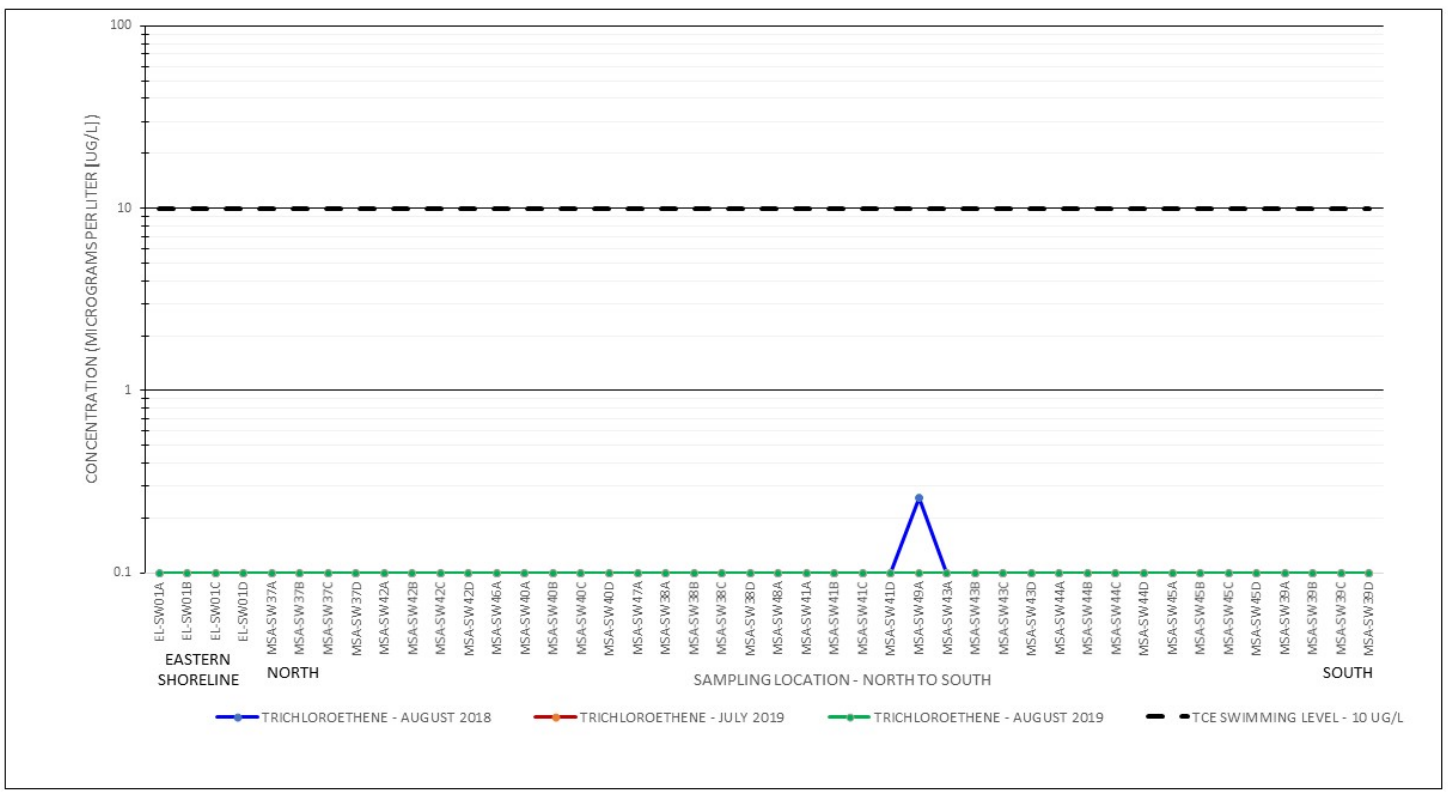
TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\fmc_sw_samplocs_201906.mxd)
08/06/19 -- SP

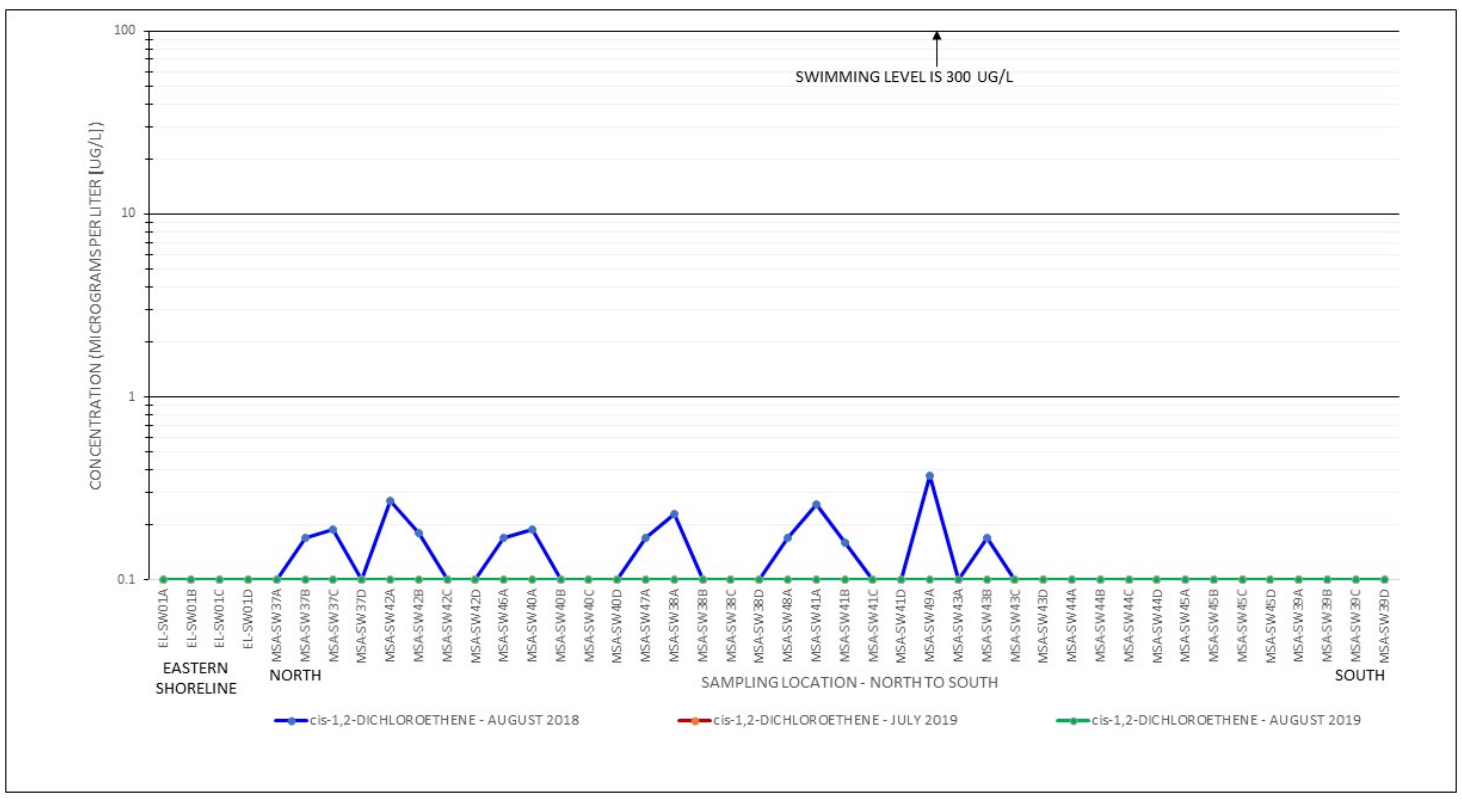
FIGURE 4-1

CONCENTRATIONS OF TRICHLOROETHENE, cis-1,2-DICHLOROETHENE AND VINYL CHLORIDE ALONG SURFACE WATER SAMPLING TRANSECTS FOR AUGUST 2018, JULY 2019, AND AUGUST 2019 FROG MORTAR CREEK

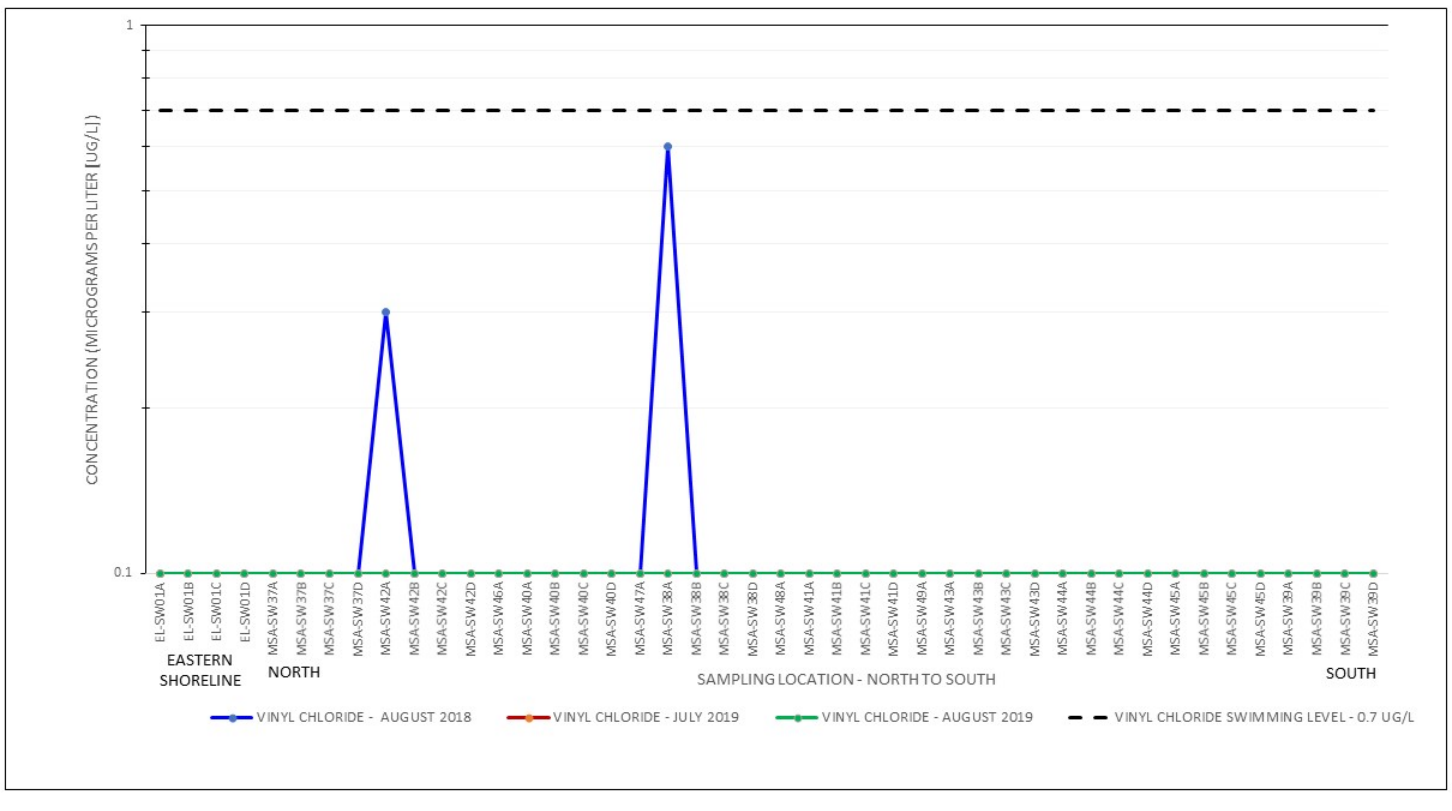
TRICHLOROETHENE



CIS-1,2-DICHLOROETHENE



VINYL CHLORIDE



Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
09/07/18	JEE

TETRA TECH

TABLES

Table 3-1 List of Samples and Chemical Analyses for Surface Water—August 2019

Table 4-1 Summary of Analytes Detected in Surface Water Samples—August 2019

Table 4-2 Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019

Table 4-3 Comparison of Primary Volatile Organic Compound Results Detected in Surface Water for the August 2018, July 2019, and August 2019 Sampling Rounds

Table 3-1

List of Samples and Chemical Analyses for Surface Water-August 2019
Frog Mortar Creek, Middle River, Maryland

	Analyses Performed[1] (Method)				
	Volatile Organic Compounds[2]	Dissolved Metals	Hexavalent Chromium	Hardness	Dissolved Organic Carbon
Sample Location ID	(USEPA 8260C)	(USEPA 6020/7470A)	(USEPA 218.6)	(SM 2340B)	(USEPA 9060)
MSA-SW37A	X	X	X	X	
MSA-SW37B	X	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	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	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	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	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	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	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	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	X
MSA-SW45C	X	X	X	X	
MSA-SW45D	X	X	X	X	
MSA-SW46A	X				
MSA-SW47A	X				
MSA-SW48A	X				
MSA-SW49A	X				
EL-SW01A	X				
EL-SW01B	X				
EL-SW01C	X				
EL-SW01D	X				

1 Temperature, pH, specific conductance, salinity, turbidity, dissolved oxygen, and oxidation-reduction potential of each sample was measured and recorded in the field
2 Includes Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane), Freon 22 (chlorodifluoromethane), and tentatively identified compounds
SM - standard method

Table 4-1

Statistical Summary of Analytes Detected in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

Parameter	August 2019 Frog Mortar Creek Surface Water Samples											
	Frequency of Detection		Minimum Conc Detected	Maximum Conc Detected	Sample of Maximum Concentration Detected	Location of Maximum Concentration Detected	Average of Detected Results	Average of All Results	Minimum Conc ND	Maximum Conc ND	StdDev	Sample Date
	Number	Percent										
Volatile Organics (ug/L)												
M+P-XYLENES	1/44	2	0.1 J	0.1 J	MSA-SW49A-080819	MSA-SW49A	0.10	0.04	0.08	0.08	0.01	20190808
TOLUENE	3/44	7	0.14 J	0.21 J	MSA-SW49A-080819	MSA-SW49A	0.17	0.08	0.14	0.14	0.03	20190808
Metals (ug/L)												
ANTIMONY	2/36	3	0.63 J	0.65 J	MSA-SW42B-080819	MSA-42B	0.64	0.61	0.57	0.57	0.03	20190808
ARSENIC	36/36	100	1.9 J	2.4 J	MSA-SW38A-080819, MSA-SW42C-080819, MSA-SW42D-080819	MSA-SW38A, MSA-SW42C, MSA-SW42D	2.15	2.15			0.13	20190808
BARIUM	36/36	100	10	13	MSA-SW39D-080819, MSA-SW45C-080819, MSA-SW45D-080819	MSA-SW39D, MSA-SW45C, MSA-SW45D	11.58	11.58			0.69	20190808
BERYLLIUM	2/36	6	0.32 J	0.37 J	MSA-SW42B-080819	MSA-SW42B	0.35	0.17	0.31	0.31	0.04	20190808
CHROMIUM	3/36	8	1.1 J	4.4	MSA-SW41D-080819	MSA-SW41D	2.23	0.64	0.98	0.98	0.66	20190808
COBALT	10/36	28	0.2 J	0.26 J	MSA-SW39D-080819	MSA-SW39D	0.22	0.13	0.19	0.19	0.06	20190808
COPPER	36/36	100	4.8	6.3	MSA-SW42D-080819	MSA-SW42D	5.50	5.50			0.40	20190808
LEAD	1/36	3	0.45 J	0.45 J	MSA-SW45D-080819	MSA-SW45D	0.45	0.23	0.45	0.45	0.04	20190808
MOLYBDENUM	7/36	19	1.1 J	1.6 J	MSA-SW42B-080819	MSA-SW42B	1.40	0.72	1.1	1.1	0.35	20190808
NICKEL	36/36	100	1.5 J	2.6	MSA-SW45D-080819	MSA-SW45D	1.79	1.79			0.26	20190808
THALLIUM	4/36	11	0.38 J	0.46 J	MSA-SW42B-080819	MSA-SW42B	0.41	0.13	0.2	0.2	0.10	20190808
TUNGSTEN	1/36	3	2.1 J	2.1 J	MSA-SW42B-080819	MSA-SW42B	2.10	0.93	1.8	1.8	0.20	20190808
VANADIUM	36/36	100	0.82 J	1.3 J	MSA-SW42D-080819	MSA-SW42D	1.02	1.02			0.11	20190808
ZINC	1/36	3	20	20	MSA-SW42C-080819	MSA-SW42C	20.00	7.85	15	15	2.08	20190808
Miscellaneous (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	36/36	100	16	19	MSA-SW39C-080819, MSA-SW39D-080819, MSA-SW45C-080819, MSA-SW45D-080819	MSA-SW39C, MSA-SW39D, MSA-SW45C, MSA-SW45D	17.89	17.89			0.62	20190808
DISSOLVED ORGANIC CARBON	9/9	100	3.3	3.7	MSA-SW37B-080819	MSA-SW37B	3.50	3.50			0.12	20190808
HARDNESS as $CaCO_3$	36/36	100	100	130	MSA-SW39A-080819, MSA-SW39B-080819, MSA-SW39C-080819, MSA-SW39D-080819, MSA-SW44B-080819, MSA-SW44C-080819, MSA-SW45B-080819, MSA-SW45C-080819, MSA-SW45D-080819	MSA-SW39A, MSA-SW39B, MSA-SW39C, MSA-SW39D, MSA-SW44B, MSA-SW44C, MSA-SW45B, MSA-SW45C, MSA-SW45D	121.11	121.11			6.67	20190808
MAGNESIUM HARDNESS as $CaCO_3$	36/36	100	85	120	MSA-SW45C-080819	MSA-SW45C	104.06	104.06			7.06	20190808

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.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Associated Samples:

EL-SW01A-080819	NORMAL	MSA-SW41C-080819	NORMAL
EL-SW01B-080819	NORMAL	MSA-SW41D-080819	NORMAL
EL-SW01C-080819	NORMAL	MSA-SW42A-080819	NORMAL
EL-SW01D-080819	NORMAL	MSA-SW42B-080819	NORMAL
MSA-SW37A-080819	NORMAL	MSA-SW42C-080819	NORMAL
MSA-SW37B-080819	NORMAL	MSA-SW42D-080819	NORMAL
MSA-SW37C-080819	NORMAL	MSA-SW43A-080819	NORMAL
MSA-SW37D-080819	NORMAL	MSA-SW43B-080819	NORMAL
MSA-SW38A-080819	NORMAL	MSA-SW43C-080819	NORMAL
MSA-SW38B-080819	NORMAL	MSA-SW43D-080819	NORMAL
MSA-SW38C-080819	NORMAL	MSA-SW44A-080819	NORMAL
MSA-SW38D-080819	NORMAL	MSA-SW44B-080819	NORMAL
MSA-SW39A-080819	NORMAL	MSA-SW44C-080819	NORMAL
MSA-SW39B-080819	NORMAL	MSA-SW44D-080819	NORMAL
MSA-SW39C-080819	NORMAL	MSA-SW45A-080819	NORMAL
MSA-SW39D-080819	NORMAL	MSA-SW45B-080819	NORMAL
MSA-SW40A-080819	NORMAL	MSA-SW45C-080819	NORMAL
MSA-SW40B-080819	NORMAL	MSA-SW45D-080819	NORMAL
MSA-SW40C-080819	NORMAL	MSA-SW46A-080819	NORMAL
MSA-SW40D-080819	NORMAL	MSA-SW47A-080819	NORMAL
MSA-SW41A-080819	NORMAL	MSA-SW48A-080819	NORMAL
MSA-SW41B-080819	NORMAL	MSA-SW49A-080819	NORMAL

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]		EL-SW01A EL-SW01A-080819 20190808	EL-SW01B EL-SW01B-080819 20190808	EL-SW01C EL-SW01C-080819 20190808	EL-SW01D EL-SW01D-080819 20190808	MSA-SW37A MSA-SW37A- 20190808	MSA-SW37B MSA-SW37B- 20190808
	Acute	Chronic										
Volatile organic compounds (µg/L)												
M+P-XYLENES	NA	NA	NA	NA	NA	0	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TOLUENE	NA	NA	2	1500	NA	2	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Dissolved (filtered) metals (µg/L)												
ANTIMONY	NA	NA	30	640	NA	2	--	--	--	--	0.57 U	0.63 J
ARSENIC	340	150	NA	0.14	NA	3	--	--	--	--	2.2 J	2.1 J
BARIUM	NA	NA	4	NA	NA	1	--	--	--	--	11	10
BERYLLIUM	NA	NA	0.66	NA	NA	1	--	--	--	--	0.32 J	0.31 U
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	3	--	--	--	--	0.98 U	0.98 U
COBALT	NA	NA	23	NA	NA	1	--	--	--	--	0.22 J	0.21 J
COPPER[6]	15.46	9.6	9.6	NA	NA	3	--	--	--	--	4.9	4.8
LEAD[5]	64.58	2.52	2.52	NA	NA	3	--	--	--	--	0.45 U	0.45 U
MOLYBDENUM	NA	NA	NA	NA	NA	0	--	--	--	--	1.4 J	1.4 J
NICKEL[5]	375.35	41.69	41.69	4600	NA	4	--	--	--	--	1.9 J	1.5 J
THALLIUM	NA	NA	0.8	0.47	NA	2	--	--	--	--	0.38 J	0.41 J
TUNGSTEN	NA	NA	NA	NA	NA	0	--	--	--	--	1.8 U	1.8 U
VANADIUM	NA	NA	20	NA	NA	1	--	--	--	--	1.1 J	1.1 J
ZINC[5]	117.18	118.14	118.14	NA	NA	3	--	--	--	--	15 U	15 U
Miscellaneous parameters (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	0	--	--	--	--	18	16
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	0	--	--	--	--	--	3.7
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	0	--	--	--	--	110	100
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	0	--	--	--	--	93	85

-- No detection or not sampled
All samples were collected on August 8, 2019
For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW37C	MSA-SW37D	MSA-SW38A	MSA-SW38B	MSA-SW38C	MSA-SW38D	MSA-SW39A
SAMPLE ID						MSA-SW37C-	MSA-SW37D-	MSA-SW38A-	MSA-SW38B-	MSA-SW38C-	MSA-SW38D-	MSA-SW39A-
SAMPLE DATE	Acute	Chronic				20190808	20190808	20190808	20190808	20190808	20190808	20190808
Volatile organic compounds (µg/L)												
M+P-XYLENES	NA	NA	NA	NA	NA	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TOLUENE	NA	NA	2	1500	NA	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Dissolved (filtered) metals (µg/L)												
ANTIMONY	NA	NA	30	640	NA	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
ARSENIC	340	150	NA	0.14	NA	2.2 J	1.9 J	2.4 J	2.2 J	2.2 J	2.1 J	1.9 J
BARIUM	NA	NA	4	NA	NA	11	11	12	11	11	11	12
BERYLLIUM	NA	NA	0.66	NA	NA	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
COBALT	NA	NA	23	NA	NA	0.19 U	0.19 U	0.21 J	0.19 U	0.19 U	0.19 U	0.19 U
COPPER[6]	15.46	9.6	9.6	NA	NA	5.4	5.4	5.8	5.3	5.4	5.1	5.2
LEAD[5]	64.58	2.52	2.52	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
MOLYBDENUM	NA	NA	NA	NA	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
NICKEL[5]	375.35	41.69	41.69	4600	NA	1.6 J	1.9 J	1.7 J	1.6 J	1.5 J	1.5 J	1.8 J
THALLIUM	NA	NA	0.8	0.47	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
TUNGSTEN	NA	NA	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
VANADIUM	NA	NA	20	NA	NA	1.2 J	1 J	1.2 J	1 J	0.99 J	0.82 J	0.95 J
ZINC[5]	117.18	118.14	118.14	NA	NA	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Miscellaneous parameters (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	18	18	18	17	17	17	18
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	--	--	--	3.6	--	--	--
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	110	110	120	120	120	120	130
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	94	95	100	100	100	100	110

-- No detection or not sampled
All samples were collected on August 8, 2019
For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW39B	MSA-SW39C	MSA-SW39D	MSA-SW40A	MSA-SW40B	MSA-SW40C	MSA-SW40D
SAMPLE ID						MSA-SW39B-	MSA-SW39C-	MSA-SW39D-	MSA-SW40A-	MSA-SW40B-	MSA-SW40C-	MSA-SW40D-
SAMPLE DATE	Acute	Chronic				20190808	20190808	20190808	20190808	20190808	20190808	20190808
Volatile organic compounds (µg/L)												
M+P-XYLENES	NA	NA	NA	NA	NA	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TOLUENE	NA	NA	2	1500	NA	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Dissolved (filtered) metals (µg/L)												
ANTIMONY	NA	NA	30	640	NA	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
ARSENIC	340	150	NA	0.14	NA	1.9 J	2 J	2.3 J	2.3 J	2.1 J	2.1 J	2.2 J
BARIUM	NA	NA	4	NA	NA	12	12	13	11	11	11	12
BERYLLIUM	NA	NA	0.66	NA	NA	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
COBALT	NA	NA	23	NA	NA	0.19 U	0.19 U	0.26 J	0.19 U	0.19 U	0.19 U	0.19 U
COPPER[6]	15.46	9.6	9.6	NA	NA	5.2	5.4	6.1	6	5.5	5.5	6.1
LEAD[5]	64.58	2.52	2.52	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
MOLYBDENUM	NA	NA	NA	NA	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.4 J
NICKEL[5]	375.35	41.69	41.69	4600	NA	2	2.4	2.2	2.1	2.1	1.6 J	1.7 J
THALLIUM	NA	NA	0.8	0.47	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
TUNGSTEN	NA	NA	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
VANADIUM	NA	NA	20	NA	NA	0.98 J	0.92 J	1.2 J	1.1 J	0.96 J	0.92 J	1 J
ZINC[5]	117.18	118.14	118.14	NA	NA	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Miscellaneous parameters (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	18	19	19	18	18	18	18
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	3.3	--	--	--	3.6	--	--
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	130	130	130	120	120	120	120
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	110	110	110	100	110	100	110

-- No detection or not sampled
All samples were collected on August 8, 2019
For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW41A	MSA-SW41B	MSA-SW41C	MSA-SW41D	MSA-SW42A	MSA-SW42B	MSA-SW42C
SAMPLE ID						MSA-SW41A-	MSA-SW41B-	MSA-SW41C-	MSA-SW41D-	MSA-SW42A-	MSA-SW42B-	MSA-SW42C-
SAMPLE DATE	Acute	Chronic				20190808	20190808	20190808	20190808	20190808	20190808	20190808
Volatile organic compounds (µg/L)												
M+P-XYLENES	NA	NA	NA	NA	NA	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TOLUENE	NA	NA	2	1500	NA	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Dissolved (filtered) metals (µg/L)												
ANTIMONY	NA	NA	30	640	NA	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.65 J	0.57 U
ARSENIC	340	150	NA	0.14	NA	2.1 J	2.2 J	2 J	2.2 J	2.3 J	2.2 J	2.4 J
BARIUM	NA	NA	4	NA	NA	11	11	11	11	12	12	11
BERYLLIUM	NA	NA	0.66	NA	NA	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.37 J	0.31 U
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	0.98 U	0.98 U	0.98 U	4.4	1.2 J	0.98 U	0.98 U
COBALT	NA	NA	23	NA	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.25 J	0.21 J	0.19 U
COPPER[6]	15.46	9.6	9.6	NA	NA	5	6	5.2	6	5.4	5.7	5.7
LEAD[5]	64.58	2.52	2.52	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
MOLYBDENUM	NA	NA	NA	NA	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.5 J	1.6 J	1.1 J
NICKEL[5]	375.35	41.69	41.69	4600	NA	1.9 J	1.7 J	1.6 J	1.7 J	2	1.8 J	1.6 J
THALLIUM	NA	NA	0.8	0.47	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.38 J	0.46 J	0.2 U
TUNGSTEN	NA	NA	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.1 J	1.8 U
VANADIUM	NA	NA	20	NA	NA	0.92 J	0.98 J	0.85 J	1.1 J	1.2 J	1.1 J	0.98 J
ZINC[5]	117.18	118.14	118.14	NA	NA	15 U	15 U	15 U	15 U	15 U	15 U	20
Miscellaneous parameters (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	18	18	17	17	18	18	18
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	--	3.4	--	--	--	3.5	--
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	120	120	120	120	120	120	120
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	100	100	100	100	99	100	100

-- No detection or not sampled
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For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW42D MSA-SW42D- 20190808	MSA-SW43A MSA-SW43A- 20190808	MSA-SW43B MSA-SW43B- 20190808	MSA-SW43C MSA-SW43C- 20190808	MSA-SW43D MSA-SW43D- 20190808	MSA-SW44A MSA-SW44A- 20190808	MSA-SW44B MSA-SW44B- 20190808
	Acute	Chronic										
Volatile organic compounds (µg/L)												
M+P-XYLENES	NA	NA	NA	NA	NA	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TOLUENE	NA	NA	2	1500	NA	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Dissolved (filtered) metals (µg/L)												
ANTIMONY	NA	NA	30	640	NA	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
ARSENIC	340	150	NA	0.14	NA	2.4 J	2.2 J	2.2 J	2.2 J	2.2 J	1.9 J	2.2 J
BARIUM	NA	NA	4	NA	NA	12	12	11	12	12	12	12
BERYLLIUM	NA	NA	0.66	NA	NA	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
COBALT	NA	NA	23	NA	NA	0.22 J	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
COPPER[6]	15.46	9.6	9.6	NA	NA	6.3	5.4	5.1	5.4	5.6	5	5.9
LEAD[5]	64.58	2.52	2.52	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
MOLYBDENUM	NA	NA	NA	NA	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
NICKEL[5]	375.35	41.69	41.69	4600	NA	1.8 J	1.7 J	1.6 J	1.6 J	1.7 J	1.6 J	1.8 J
THALLIUM	NA	NA	0.8	0.47	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
TUNGSTEN	NA	NA	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
VANADIUM	NA	NA	20	NA	NA	1.3 J	1.1 J	0.89 J	0.99 J	0.97 J	0.89 J	0.9 J
ZINC[5]	117.18	118.14	118.14	NA	NA	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Miscellaneous parameters (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	18	18	17	18	18	18	18
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	--	--	3.5	--	--	--	3.5
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	120	120	120	120	120	120	130
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	100	110	100	110	110	110	110

-- No detection or not sampled
All samples were collected on August 8, 2019
For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW44C	MSA-SW44D	MSA-SW45A	MSA-SW45B	MSA-SW45C	MSA-SW45D	MSA-SW46A
SAMPLE ID						MSA-SW44C-	MSA-SW44D-	MSA-SW45A-	MSA-SW45B-	MSA-SW45C-	MSA-SW45D-	MSA-SW46A-
SAMPLE DATE	Acute	Chronic				20190808	20190808	20190808	20190808	20190808	20190808	20190808
Volatile organic compounds (µg/L)												
M+P-XYLENES	NA	NA	NA	NA	NA	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
TOLUENE	NA	NA	2	1500	NA	0.14 U	0.14 U	0.14 J	0.14 U	0.14 U	0.14 U	0.15 J
Dissolved (filtered) metals (µg/L)												
ANTIMONY	NA	NA	30	640	NA	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	--
ARSENIC	340	150	NA	0.14	NA	2.2 J	2.1 J	2.1 J	2 J	2.1 J	2.1 J	--
BARIUM	NA	NA	4	NA	NA	12	11	12	12	13	13	--
BERYLLIUM	NA	NA	0.66	NA	NA	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	--
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	0.98 U	0.98 U	0.98 U	0.98 U	1.1 J	0.98 U	--
COBALT	NA	NA	23	NA	NA	0.19 U	0.19 U	0.2 J	0.19 U	0.2 J	0.22 J	--
COPPER[6]	15.46	9.6	9.6	NA	NA	6.1	5.3	5.5	4.8	5.6	5.9	--
LEAD[5]	64.58	2.52	2.52	NA	NA	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 J	--
MOLYBDENUM	NA	NA	NA	NA	NA	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.4 J	--
NICKEL[5]	375.35	41.69	41.69	4600	NA	1.7 J	1.5 J	1.8 J	1.7 J	2.1	2.6	--
THALLIUM	NA	NA	0.8	0.47	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	--
TUNGSTEN	NA	NA	NA	NA	NA	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	--
VANADIUM	NA	NA	20	NA	NA	0.97 J	0.89 J	1.1 J	0.96 J	1.1 J	1 J	--
ZINC[5]	117.18	118.14	118.14	NA	NA	15 U	15 U	15 U	15 U	15 U	15 U	--
Miscellaneous parameters (mg/L)												
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	18	18	18	18	19	19	--
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	--	--	--	3.4	--	--	--
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	130	120	120	130	130	130	--
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	110	110	110	110	120	110	--

-- No detection or not sampled
All samples were collected on August 8, 2019
For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-2

Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE	National Recommended Water Quality Criteria[1]		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1][3]	Swimming Screening Levels[4]	MSA-SW47A MSA-SW47A- 20190808	MSA-SW48A MSA-SW48A- 20190808	MSA-SW49A MSA-SW49A- 20190808	QC TB-080819 20190808
	Acute	Chronic							
Volatile organic compounds (µg/L)									
M+P-XYLENES	NA	NA	NA	NA	NA	0.08 U	0.08 U	0.1 J	0.08 U
TOLUENE	NA	NA	2	1500	NA	0.14 U	0.14 U	0.21 J	0.14 U
Dissolved (filtered) metals (µg/L)									
ANTIMONY	NA	NA	30	640	NA	--	--	--	--
ARSENIC	340	150	NA	0.14	NA	--	--	--	--
BARIUM	NA	NA	4	NA	NA	--	--	--	--
BERYLLIUM	NA	NA	0.66	NA	NA	--	--	--	--
CHROMIUM[5]	569.76	74.11	74.11	NA	NA	--	--	--	--
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER[6]	15.46	9.6	9.6	NA	NA	--	--	--	--
LEAD[5]	64.58	2.52	2.52	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	NA	NA	NA	--	--	--	--
NICKEL[5]	375.35	41.69	41.69	4600	NA	--	--	--	--
THALLIUM	NA	NA	0.8	0.47	NA	--	--	--	--
TUNGSTEN	NA	NA	NA	NA	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	--	--	--	--
ZINC[5]	117.18	118.14	118.14	NA	NA	--	--	--	--
Miscellaneous parameters (mg/L)									
CALCIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	--	--	--	--
DISSOLVED ORGANIC CARBON	NA	NA	NA	NA	NA	--	--	--	--
HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	--	--	--	--
MAGNESIUM HARDNESS as $CaCO_3$	NA	NA	NA	NA	NA	--	--	--	--

-- No detection or not sampled
All samples were collected on August 8, 2019
For non-detects, 1/2 sample quantitation limit was used as proxy.
1/2 the detection limit was used to calculate statistics for B qualified data.
J - estimated value
µg/L - micrograms per liter
mg/L - milligrams per liter

Table 4-3

Comparison of Primary Volatile Organic Compound Results Detected in Surface Water for the August 2018, July 2019, and August 2019 Sampling Rounds
Frog Mortar Creek, Middle River, Maryland

Location ID	Trichloroethene concentrations (µg/L)			*cis* -1,2-Dichloroethene concentrations (µg/L)			Vinyl chloride concentrations (µg/L)		
	Aug 7, 2018	July 10, 2019	Aug 8, 2019	Aug 7, 2018	July 10, 2019	Aug 8, 2019	Aug 7, 2018	July 10, 2019	Aug 8, 2019
Average-Detections	**0.26**	**NA**	**NA**	**0.208**	**NA**	**NA**	**0.45**	**NA**	**NA**
Average-All Samples[1]	**0.055**	**0.05**	**0.05**	**0.118**	**0.08**	**0.08**	**0.116**	**0.1**	**0.1**
Maximum Concentration	**0.26 J**	**NA**	**NA**	**0.37 J**	**NA**	**NA**	**0.6**	**NA**	**NA**
No. of Detections/Samples	**1/44**	**0/44**	**0/44**	**13/44**	**0/44**	**0/44**	**2/44**	**0/44**	**0/44**
EL-SW01A	--	--	--	--	--	--	--	--	--
EL-SW01B	--	--	--	--	--	--	--	--	--
EL-SW01C	--	--	--	--	--	--	--	--	--
EL-SW01D	--	--	--	--	--	--	--	--	--
MSA-SW37A	--	--	--	--	--	--	--	--	--
MSA-SW37B	--	--	--	0.17 J	--	--	--	--	--
MSA-SW37C	--	--	--	0.19 J	--	--	--	--	--
MSA-SW37D	--	--	--	--	--	--	--	--	--
MSA-SW38A	--	--	--	0.23 J	--	--	0.6	--	--
MSA-SW38B	--	--	--	--	--	--	--	--	--
MSA-SW38C	--	--	--	--	--	--	--	--	--
MSA-SW38D	--	--	--	--	--	--	--	--	--
MSA-SW39A	--	--	--	--	--	--	--	--	--
MSA-SW39B	--	--	--	--	--	--	--	--	--
MSA-SW39C	--	--	--	--	--	--	--	--	--
MSA-SW39D	--	--	--	--	--	--	--	--	--
MSA-SW40A	--	--	--	0.19 J	--	--	--	--	--
MSA-SW40B	--	--	--	--	--	--	--	--	--
MSA-SW40C	--	--	--	--	--	--	--	--	--
MSA-SW40D	--	--	--	--	--	--	--	--	--
MSA-SW41A	--	--	--	0.26 J	--	--	--	--	--
MSA-SW41B	--	--	--	0.16 J	--	--	--	--	--
MSA-SW41C	--	--	--	--	--	--	--	--	--
MSA-SW41D	--	--	--	--	--	--	--	--	--
MSA-SW42A	--	--	--	0.27 J	--	--	0.3 J	--	--
MSA-SW42B	--	--	--	0.18 J	--	--	--	--	--
MSA-SW42C	--	--	--	```	--	--	--	--	--
MSA-SW42D	--	--	--	--	--	--	--	--	--
MSA-SW43A	--	--	--	--	--	--	--	--	--
MSA-SW43B	--	--	--	0.17 J	--	--	--	--	--
MSA-SW43C	--	--	--	--	--	--	--	--	--
MSA-SW43D	--	--	--	--	--	--	--	--	--
MSA-SW44A	--	--	--	--	--	--	--	--	--
MSA-SW44B	--	--	--	--	--	--	--	--	--
MSA-SW44C	--	--	--	--	--	--	--	--	--
MSA-SW44D	--	--	--	--	--	--	--	--	--
MSA-SW45A	--	--	--	--	--	--	--	--	--
MSA-SW45B	--	--	--	--	--	--	--	--	--
MSA-SW45C	--	--	--	--	--	--	--	--	--
MSA-SW45D	--	--	--	--	--	--	--	--	--
MSA-SW46A	--	--	--	0.17 J	--	--	--	--	--
MSA-SW47A	--	--	--	0.17 J	--	--	--	--	--
MSA-SW48A	--	--	--	0.17 J	--	--	--	--	--
MSA-SW49A	0.26 J	--	--	0.37 J	--	--	--	--	--

Averages were calculated using 1/2 sample quantitation limit (nondetects) and 1/2 the detection limit (B-qualifie -- = non-detect concentration J - estimated value µg/L - micrograms per liter

APPENDICES

Appendix A—Field Measurements for Water Quality and Surface-Water-Sample Log Sheets

Appendix B—Data-Validation Reports

Appendix C—Chemical-Results Data Table

Appendix D—Biotic Ligand Model Calculations and EPA 2007 BLM Fact Sheet

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

Water Quality Field Parameters-August 2019
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River Maryland

Sample ID		Date	Time	pH	Specific conductance (S.C.)	Temperature (Temp.)	Turbidity	Dissolved oxygen (DO)	Salinity	Oxidation-reduction potential (ORP)	Water Depth
Location	Date ID	mo/day/year	24-hour units	Standard unit (S.U.)	MilliSiemens per centimeter (mS/cm)	Degrees Celsius (°C)	Nephelometric turbidity unit (NTU)	Milligrams per liter (mg/L)	Parts per thousand (ppt)	MilliVolts (mV)	Meters (m)
EL-SW01A	-080819	8/8/2019	0754	6.77	1.09	28.20	22.0	7.40	0.54	330	0.30
EL-SW01B	-080819	8/8/2019	0759	7.24	1.09	28.71	21.6	5.82	0.54	301	0.88
EL-SW01C	-080819	8/8/2019	0801	7.31	1.09	28.79	22.5	5.91	0.54	294	1.20
EL-SW01D	-080819	8/8/2019	0804	7.34	1.09	28.89	21.4	5.57	0.54	289	1.48
MSA-SW37A	-080819	8/8/2019	1102	7.79	0.808	30.20	29.30	6.26	0.39	229	0.52
MSA-SW37B	-080819	8/8/2019	1106	7.87	0.802	29.84	23.70	6.45	0.39	228	1.37
MSA-SW37C	-080819	8/8/2019	1111	7.92	0.815	30.10	23.40	6.82	0.39	230	1.65
MSA-SW37D	-080819	8/8/2019	1115	7.87	0.842	30.27	21.60	6.51	0.41	232	>1.7
MSA-SW38A	-080819	8/8/2019	1001	7.54	0.892	29.64	22.90	5.33	0.44	222	0.45
MSA-SW38B	-080819	8/8/2019	1005	7.50	0.891	29.41	22.00	5.80	0.44	228	1.40
MSA-SW38C	-080819	8/8/2019	1010	7.50	0.892	29.44	20.00	5.83	0.44	237	1.52
MSA-SW38D	-080819	8/8/2019	1015	7.53	0.892	29.42	22.30	6.05	0.44	241	>1.7
MSA-SW39A	-080819	8/8/2019	0811	7.29	1.18	28.57	28.50	8.53	0.59	330	0.75
MSA-SW39B	-080819	8/8/2019	0818	7.25	1.18	28.76	22.40	5.33	0.59	298	1.30
MSA-SW39C	-080819	8/8/2019	0824	7.27	1.19	28.81	22.80	5.19	0.59	282	1.38
MSA-SW39D	-080819	8/8/2019	0831	7.26	1.21	28.88	22.70	5.35	0.60	273	>1.7
MSA-SW40A	-080819	8/8/2019	1023	7.57	0.883	29.77	25.40	6.03	0.43	221	0.44
MSA-SW40B	-080819	8/8/2019	1026	7.43	0.891	29.57	21.60	5.84	0.44	229	1.18
MSA-SW40C	-080819	8/8/2019	1031	7.54	0.891	29.76	18.90	5.85	0.44	231	1.56
MSA-SW40D	-080819	8/8/2019	1035	7.61	0.892	29.55	21.70	6.99	0.44	233	>1.7
MSA-SW41A	-080819	8/8/2019	0937	7.52	0.882	29.37	21.20	5.57	0.43	246	0.48
MSA-SW41B	-080819	8/8/2019	0940	7.51	0.899	29.39	20.20	5.77	0.44	247	1.28
MSA-SW41C	-080819	8/8/2019	0946	7.50	0.818	29.33	21.80	5.68	0.44	250	1.55
MSA-SW41D	-080819	8/8/2019	0949	7.49	0.900	29.40	20.80	5.66	0.44	251	>1.7
MSA-SW42A	-080819	8/8/2019	1043	7.59	0.835	29.69	50.90	6.05	0.42	224	0.61
MSA-SW42B	-080819	8/8/2019	1047	7.59	0.879	29.67	22.40	6.07	0.43	227	1.58
MSA-SW42C	-080819	8/8/2019	1052	7.71	0.880	29.75	21.60	6.23	0.43	231	>1.7
MSA-SW42D	-080819	8/8/2019	1056	7.68	0.879	29.68	22.00	6.57	0.43	235	>1.7
MSA-SW43A	-080819	8/8/2019	0916	7.40	0.895	29.18	22.90	251.00	0.44	251	0.52
MSA-SW43B	-080819	8/8/2019	0920	7.43	0.901	29.21	20.80	247.00	0.44	247	1.51
MSA-SW43C	-080819	8/8/2019	0923	7.44	0.909	29.28	20.50	251.00	0.44	251	>1.7
MSA-SW43D	-080819	8/8/2019	0926	7.44	0.910	29.29	19.90	253.00	0.44	253	>1.7
MSA-SW44A	-080819	8/8/2019	0856	7.42	0.909	29.03	21.60	6.68	0.44	253	0.39
MSA-SW44B	-080819	8/8/2019	0901	7.39	0.918	29.07	19.60	6.67	0.45	256	1.54
MSA-SW44C	-080819	8/8/2019	0905	7.42	0.914	29.14	20.20	6.60	0.45	256	>1.7
MSA-SW44D	-080819	8/8/2019	0909	7.44	0.911	29.17	19.50	6.60	0.45	257	>1.7
MSA-SW45A	-080819	8/8/2019	0837	7.56	1.120	28.79	22.10	7.33	0.55	264	0.48
MSA-SW45B	-080819	8/8/2019	0840	7.32	1.180	28.87	21.90	6.94	0.58	263	>1.7
MSA-SW45C	-080819	8/8/2019	0847	7.31	1.230	28.97	21.60	6.70	0.61	260	>1.8
MSA-SW45D	-080819	8/8/2019	0849	7.31	1.260	29.03	19.60	6.64	0.62	260	>1.9
MSA-SW46A	-080819	8/8/2019	1039	7.59	0.835	29.69	50.90	6.05	0.42	224	0.61
MSA-SW47A	-080819	8/8/2019	1018	7.52	0.890	29.95	31.20	6.11	0.43	232	0.42
MSA-SW48A	-080819	8/8/2019	0956	7.49	0.900	29.40	20.80	5.66	0.44	251	>1.7
MSA-SW49A	-080819	8/8/2019	0932	7.49	0.890	29.34	19.50	6.67	0.43	250	0.45

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: EL-SW01A -080819
Sample Location: EL-SW01A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	0754	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**clear**	**6.77**	**1.09**	**28.20**	**22.00**	**7.40**	**0.54**	**330**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.3 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: EL-SW01B -080819
Sample Location: EL-SW01B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0759								
Depth:	1 ft below water	**clear**	**7.24**	**1.09**	**28.71**	**21.6**	**5.82**	**0.54**	**301**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.88 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: EL-SW01C -080819
Sample Location: EL-SW01C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	0801	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**clear**	**7.31**	**1.09**	**28.79**	**22.50**	**5.91**	**0.54**	**294**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.2 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: EL-SW01D -080819
Sample Location: EL-SW01D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0804								
Depth:	1 ft below water	**clear**	**7.34**	**1.09**	**28.89**	**21.4**	**5.57**	**0.54**	**289**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.48 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW37A -080819
Sample Location: MSA-SW37A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1102								
Depth:	1 ft below water	**clear**	**7.79**	**0.808**	**30.2**	**29.3**	**6.26**	**0.39**	**229**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.52 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW37B -080819
Sample Location: MSA-SW37B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	1106								
Depth:	1 ft below water	clear	7.87	0.802	29.84	23.7	6.45	0.39	228
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.37 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW37C -080819
Sample Location: MSA-SW37C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1111								
Depth:	1 ft below water	**clear**	**7.92**	**0.815**	**30.1**	**23.4**	**6.82**	**0.39**	**230**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.65 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW37D -080819
Sample Location: MSA-SW37D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	1115	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**clear**	**7.87**	**0.842**	**30.27**	**21.6**	**6.51**	**0.41**	**232**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW38A -080819
Sample Location: MSA-SW38A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	1001								
Depth:	1 ft below water	**clear**	**7.54**	**0.892**	**29.64**	**22.9**	**5.33**	**0.44**	**222**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.45 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW38B -080819
Sample Location: MSA-SW38B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	1005	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**clear**	**7.50**	**0.891**	**29.41**	**22.00**	**5.8**	**0.44**	**228**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.4 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW38C -080819
Sample Location: MSA-SW38C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1010								
Depth:	1 ft below water	**clear**	**7.50**	**0.892**	**29.44**	**20**	**5.83**	**0.44**	**237**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.52 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW38D -080819
Sample Location: MSA-SW38D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1015								
Depth:	1 ft below water	**clear**	**7.53**	**0.89**	**29.42**	**22.30**	**6.05**	**0.44**	**241**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW39A -080819
Sample Location: MSA-SW39A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0811								
Depth:	1 ft below water	**clear**	**7.29**	**1.18**	**28.57**	**28.5**	**8.53**	**0.59**	**330**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.75 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW39B -080819
Sample Location: MSA-SW39B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0818								
Depth:	1 ft below water	**clear**	**7.25**	**1.18**	**28.76**	**22.4**	**5.33**	**0.59**	**298**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.3 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW39C -080819
Sample Location: MSA-SW39C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0824								
Depth:	1 ft below water	**clear**	**7.27**	**1.19**	**28.81**	**22.8**	**5.19**	**0.59**	**282**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.4 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW39D -080819
Sample Location: MSA-SW39D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0831								
Depth:	1 ft below water	**clear**	**7.26**	**1.19**	**28.88**	**22.7**	**5.35**	**0.6**	**273**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW40A -080819
Sample Location: MSA-SW40A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1023								
Depth:	1 ft below water	clear	7.57	0.88	29.77	25.40	6.03	0.4	221
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.44 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW40B -080819
Sample Location: MSA-SW40B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	1026	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	clear	7.43	0.89	29.57	21.60	5.84	0.4	229
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.18 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW40C -080819
Sample Location: MSA-SW40C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1031								
Depth:	1 ft below water	clear	7.54	0.89	29.76	18.90	5.85	0.4	231
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.56 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW40D -080819
Sample Location: MSA-SW40D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1035								
Depth:	1 ft below water	**clear**	**7.61**	**0.89**	**29.55**	**21.70**	**6.99**	**0.4**	**233**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW41A -080819
Sample Location: MSA-SW41A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0937								
Depth:	1 ft below water	**clear**	**7.52**	**0.88**	**29.37**	**21.20**	**5.57**	**0.4**	**246**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.48 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW41B -080819
Sample Location: MSA-SW41B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	0940	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**clear**	**7.51**	**0.90**	**29.39**	**20.20**	**5.77**	**0.4**	**247**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.28 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW41C -080819
Sample Location: MSA-SW41C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0946								
Depth:	1 ft below water	**clear**	**7.50**	**0.82**	**29.33**	**21.80**	**5.68**	**0.4**	**250**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.55 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW41D -080819
Sample Location: MSA-SW41D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0949								
Depth:	1 ft below water	**clear**	**7.49**	**0.90**	**29.40**	**20.80**	**5.66**	**0.4**	**251**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW42A -080819
Sample Location: MSA-SW42A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1043								
Depth:	1 ft below water	clear	7.59	0.84	29.69	50.90	6.05	0.4	224
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.61 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW42B -080819
Sample Location: MSA-SW42B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	1047	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	clear	7.59	0.88	29.67	22.40	6.07	0.4	227
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.58 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW42C -080819
Sample Location: MSA-SW42C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	1052	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	**clear**	**7.71**	**0.88**	**29.75**	**21.60**	**6.23**	**0.4**	**231**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW42D -080819
Sample Location: MSA-SW42D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1056								
Depth:	1 ft below water	**clear**	**7.68**	**0.88**	**29.68**	**22.00**	**6.57**	**0.4**	**235**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW43A -080819
Sample Location: MSA-SW43A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0916								
Depth:	1 ft below water	**clear**	**7.40**	**0.90**	**29.18**	**22.90**	**251.00**	**0.4**	**251**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.52 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW43B -080819
Sample Location: MSA-SW43B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019								
Time:	0920	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Depth:	1 ft below water	clear	#REF!	0.90	29.21	20.80	247.00	0.4	247
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.5 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW43C -080819
Sample Location: MSA-SW43C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0923								
Depth:	1 ft below water	**clear**	**7.43**	**0.91**	**29.28**	**20.50**	**251.00**	**0.4**	**251**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW43D -080819
Sample Location: MSA-SW43D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0926								
Depth:	1 ft below water	**clear**	**7.44**	**0.91**	**29.29**	**19.90**	**253.00**	**0.4**	**253**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW44A -080819
Sample Location: MSA-SW44A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0856								
Depth:	1 ft below water	**clear**	**7.44**	**0.909**	**29.03**	**21.60**	**6.68**	**0.4**	**253**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.39 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW44B -080819
Sample Location: MSA-SW44B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0901								
Depth:	1 ft below water	**clear**	**7.39**	**0.918**	**29.07**	**19.60**	**6.67**	**0.5**	**256**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth 1.54 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW44C -080819
Sample Location: MSA-SW44C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0905								
Depth:	1 ft below water	**clear**	**7.42**	**0.914**	**29.14**	**20.20**	**6.60**	**0.5**	**256**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW44D -080819
Sample Location: MSA-SW44D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0909								
Depth:	1 ft below water	**clear**	**7.44**	**0.911**	**29.17**	**19.50**	**6.60**	**0.5**	**257**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW45A -080819
Sample Location: MSA-SW45A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0837								
Depth:	1 ft below water	**clear**	**7.56**	**1.12**	**28.79**	**22.10**	**7.33**	**0.6**	**264**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth 0.48 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW45B -080819
Sample Location: MSA-SW45B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0840								
Depth:	1 ft below water	**clear**	**7.32**	**1.18**	**28.87**	**21.90**	**6.94**	**0.6**	**263**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes
Dissolved organic carbon	H2SO4	2-40mL ambers filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW45C -080819
Sample Location: MSA-SW45C
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0847								
Depth:	1 ft below water	**clear**	**7.31**	**1.23**	**28.97**	**21.60**	**6.70**	**0.6**	**260**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.8 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW45D -080819
Sample Location: MSA-SW45D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	0849								
Depth:	1 ft below water	**clear**	**7.31**	**1.26**	**29.03**	**19.60**	**6.64**	**0.6**	**260**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	HCL pH<2	3 - 40 mL glass vials	Yes
Dissolved metals + Hardness	HNO_3 pH<2	1 - 500 mL plastic filtered	Yes
Dissolved Hexavalent chromium	cr6 buffer	1 - 250 mL plastic filtered	Yes

OBSERVATIONS / NOTES:

Water depth >1.9 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW46A -080819
Sample Location: MSA-SW46A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	1039								
Depth:	1 ft below water	clear	7.59	0.84	29.69	50.90	6.05	0.4	224
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.61 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW47A -080819
Sample Location: MSA-SW47A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/L)	Salinity (ppt)	ORP mV
Date:	8/8/2019								
Time:	1018								
Depth:	1 ft below water	**clear**	**7.52**	**0.89**	**29.95**	**31.20**	**6.11**	**0.4**	**232**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.42 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW48A -080819
Sample Location: MSA-SW48A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0956								
Depth:	1 ft below water	**clear**	**7.49**	**0.90**	**29.40**	**20.80**	**5.66**	**0.4**	**251**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >1.7 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC08735

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

Sample ID No.: MSA-SW49A -080819
Sample Location: MSA-SW49A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/8/2019	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	0932								
Depth:	1 ft below water	**clear**	**7.49**	**0.89**	**29.34**	**19.50**	**6.67**	**0.4**	**250**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 0.45 meters

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX B—DATA-VALIDATION REPORTS

TETRA TECH **INTERNAL CORRESPONDENCE**

TO: **S. BRENNER** **DATE:** **OCTOBER 2, 2019**

FROM: **LEIGH A. CIOFANI** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / DISSOLVED METALS / HARDNESS / DISSOLVED ORGANIC CARBON**
MSA SURFACE WATER – FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-117170-1

SAMPLES: 45 / Aqueous / VOC

EL-SW01A-080819	EL-SW01B-080819	EL-SW01C-080819
EL-SW01D-080819	MSA-SW37A-080819	MSA-SW37B-080819
MSA-SW37C-080819	MSA-SW37D-080819	MSA-SW38A-080819
MSA-SW38B-080819	MSA-SW38C-080819	MSA-SW38D-080819
MSA-SW39A-080819	MSA-SW39B-080819	MSA-SW39C-080819
MSA-SW39D-080819	MSA-SW40A-080819	MSA-SW40B-080819
MSA-SW40C-080819	MSA-SW40D-080819	MSA-SW41A-080819
MSA-SW41B-080819	MSA-SW41C-080819	MSA-SW41D-080819
MSA-SW42A-080819	MSA-SW42B-080819	MSA-SW42C-080819
MSA-SW42D-080819	MSA-SW43A-080819	MSA-SW43B-080819
MSA-SW43C-080819	MSA-SW43D-080819	MSA-SW44A-080819
MSA-SW44B-080819	MSA-SW44C-080819	MSA-SW44D-080819
MSA-SW45A-080819	MSA-SW45B-080819	MSA-SW45C-080819
MSA-SW45D-080819	MSA-SW46A-080819	MSA-SW47A-080819
MSA-SW48A-080819	MSA-SW49A-080819	TB-080819

36 / Aqueous / Dissolved Metals / Hardness

MSA-SW37A-080819	MSA-SW37B-080819	MSA-SW37C-080819
MSA-SW37D-080819	MSA-SW38A-080819	MSA-SW38B-080819
MSA-SW38C-080819	MSA-SW38D-080819	MSA-SW39A-080819
MSA-SW39B-080819	MSA-SW39C-080819	MSA-SW39D-080819
MSA-SW40A-080819	MSA-SW40B-080819	MSA-SW40C-080819
MSA-SW40D-080819	MSA-SW41A-080819	MSA-SW41B-080819
MSA-SW41C-080819	MSA-SW41D-080819	MSA-SW42A-080819
MSA-SW42B-080819	MSA-SW42C-080819	MSA-SW42D-080819
MSA-SW43A-080819	MSA-SW43B-080819	MSA-SW43C-080819
MSA-SW43D-080819	MSA-SW44A-080819	MSA-SW44B-080819
MSA-SW44C-080819	MSA-SW44D-080819	MSA-SW45A-080819
MSA-SW45B-080819	MSA-SW45C-080819	MSA-SW45D-080819

9 / Aqueous / Dissolved Organic Carbon

MSA-SW37B-080819	MSA-SW38B-080819	MSA-SW39B-080819
MSA-SW40B-080819	MSA-SW41B-080819	MSA-SW42B-080819
MSA-SW43B-080819	MSA-SW44B-080819	MSA-SW45B-080819

OVERVIEW

The sample set for MSA Surface Water, SDG 240-117170-1, consists of forty-four (44) aqueous environmental samples and one (1) trip blank. Samples were analyzed for volatile organic compounds

(VOCs), dissolved metals, hardness, and dissolved organic carbon [DOC]. Additionally, VOC samples were analyzed for tentatively identified compounds (TICs). No field duplicate pairs are included in this SDG.

The samples were collected by Tetra Tech on August 8, 2019 and analyzed by Eurofins TestAmerica. Analyses were conducted in accordance with SW-846 Methods 8260C (for VOC), 7470A and 6020 (for mercury and remaining metals, respectively), and 9060A (for DOC) as well as Standard Method 2340B (for hardness) analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, ICP/MS tuning, initial/continuing calibrations, laboratory method/trip blank results, surrogate spike recoveries, interference check standards, laboratory control sample results, matrix spike/matrix spike duplicate results, internal standard recoveries, ICP serial dilution results, compound identification, tentatively identified compounds, analyte quantitation, and detection limits.

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

MAJOR PROBLEMS

- The laboratory case narrative indicates that all VOC samples were preserved with hydrochloric acid, and the VOC analyte 2-chloroethyl vinyl ether is an acid-labile compound that degrades in an acidic medium. The non-detected results for 2-chloroethyl vinyl ether were rejected (UR) in all VOC samples.

MINOR PROBLEMS

- The VOC continuing calibration performed on 08/20/19 at 16:38 on instrument A3UX12 had percent differences (%Ds) that were greater than the 20% quality control limit for chloromethane, tertiary butyl alcohol, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene. Samples TB-080819, MSA-SW46A-080819, MSA-SW47A-080819, MSA-SW48A-080819, and MSA-SW49A-080819 were affected. The non-detected results for these analytes were qualified as estimated (UJ) in the affected samples.

- The VOC continuing calibration performed on 08/12/19 at 18:14 on instrument A3UX19 had %Ds that were greater than the 20% quality control limit for 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, and hexachlorobutadiene. The following samples were affected: MSA-SW37A-080819, MSA-SW37B-080819, MSA-SW37C-080819, MSA-SW37D-080819, MSA-SW38A-080819, MSA-SW38B-080819, MSA-SW38C-080819, MSA-SW38D-080819, MSA-SW39A-080819, MSA-SW39B-080819, MSA-SW39C-080819, MSA-SW39D-080819, MSA-SW40A-080819, MSA-SW40B-080819, MSA-SW40C-080819, MSA-SW40D-080819, MSA-SW41A-080819, MSA-SW41B-080819, MSA-SW41C-080819, and MSA-SW41D-080819. The non-detected results for these analytes were qualified as estimated (UJ) in the affected samples.

- The VOC continuing calibration performed on 08/13/19 at 17:38 on instrument A3UX19 had %Ds that were greater than the 20% quality control limit for 1,2,3-trimethylbenzene, dibromomethane, and hexachlorobutadiene. Samples MSA-SW42A-080819, MSA-SW42B-080819, MSA-SW42C-080819, MSA-SW42D-080819, MSA-SW43A-080819, MSA-SW43B-080819, MSA-SW43C-080819, MSA-SW43D-080819, MSA-SW44A-080819, MSA-SW44B-080819, MSA-SW44C-080819, MSA-SW44D-080819, MSA-SW45A-080819, MSA-SW45B-080819, MSA-SW45C-080819, MSA-SW45D-080819, EL-SW01A-080819, EL-SW01B-080819, EL-SW01C-080819, and EL-SW01D-080819 were affected. The non-detected results for these analytes were qualified as estimated (UJ) in the affected samples.

- A tentatively identified compound (TIC) search was performed for the compound chlorodifluoromethane. Non-detected results were qualified as estimated (UJ) because the compound was not calibrated and the detection limit is an estimated value.

- Detected results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Non-detected results were reported to the MDL in the database and to the RL on the Form Is.

Sample MSA-SW38C-080819 was listed as MSA-SW38C080819 in the database and on the laboratory Form Is. This sample name was updated to MSA-SW38C-080819 in the database and on the Form Is by the data reviewer to match the chain of custody.

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

Analyte	Maximum Concentration	< or > RL
Silver	0.0980 ug/L(1)	< RL
Silver	0.106 ug/L(2)	< RL

1 - Maximum concentration detected in method blank associated with preparation batch 240-395466 affecting samples MSA-SW37A-080819, MSA-SW37B-080819, MSA-SW37C-080819, MSA-SW37D-080819, MSA-SW38A-080819, MSA-SW38B-080819, MSA-SW38C-080819, MSA-SW38D-080819, MSA-SW39A-080819, MSA-SW39B-080819, MSA-SW39C-080819, MSA-SW39D-080819, MSA-SW40A-080819, MSA-SW40B-080819, MSA-SW40C-080819, MSA-SW40D-080819, MSA-SW41A-080819, MSA-SW41B-080819, MSA-SW41C-080819, and MSA-SW41D-080819.
2 - Maximum concentration detected in method blank associated with preparation batch 240-395472 affecting samples MSA-SW42A-080819, MSA-SW42B-080819, MSA-SW42C-080819, MSA-SW42D-080819, MSA-SW43A-080819, MSA-SW43B-080819, MSA-SW43C-080819, MSA-SW43D-080819, MSA-SW44A-080819, MSA-SW44B-080819, MSA-SW44C-080819, MSA-SW44D-080819, MSA-SW45A-080819, MSA-SW45B-080819, MSA-SW45C-080819, and MSA-SW45D-080819.

No qualification was necessary because all silver results were non-detected in the affected samples.

The metals matrix spike (MS)/matrix spike duplicate (MSD) analysis performed on sample MSA-SW42A-080819 had an MS percent recovery (%R) that was greater than the laboratory quality control limits for mercury. No qualification was necessary because results for mercury were non-detected in all samples.

Although DOC sample EL-SW01B-080819 was listed on the chain of custody, as noted by the laboratory in the case narrative report, the laboratory did not receive the DOC volume for sample EL-SW01B-080819. The laboratory contacted the client about the missing volume, and the client informed the laboratory that the DOC was not collected for this sample.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Some VOC results were qualified due to calibration noncompliance.

Other Factors Affecting Data Quality: Non-detected results for 2-chloroethyl vinyl ether were rejected due to preservation noncompliance. Non-detected results for the TIC chlorodifluoromethane were qualified as estimated because the GC/MS was not calibrated for this compound. Detected results reported below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA “National Functional Guidelines for

Organic Superfund Methods Data Review" (January 2017) and the USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (January 2017). The text of this report has been formulated to address only those problem areas affecting data quality.

Leigh A. Ciofani

Tetra Tech
Leigh A. Ciofani
Environmental Scientist/Data Validator

Joseph A. Samchuck

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 Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted detection limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

Qualifier Codes:

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

PROJ_NO: 08735	NSAMPLE	EL-SW01A-080819			EL-SW01B-080819			EL-SW01C-080819			EL-SW01D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-37			240-117170-38			240-117170-39			240-117170-40		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U		0.13	U		0.13	U		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	UJ	C	0.14	UJ	C	0.14	UJ	C	0.14	UJ	C
1,2,4-TRICHLOROBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW37A-080819			MSA-SW37B-080819			MSA-SW37C-080819			MSA-SW37D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-1			240-117170-2			240-117170-3			240-117170-4		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C	0.26	UJ	C	0.26	UJ	C	0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW38A-080819			MSA-SW38B-080819			MSA-SW38C-080819			MSA-SW38D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-5			240-117170-6			240-117170-7			240-117170-8		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C	0.26	UJ	C	0.26	UJ	C	0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW39A-080819			MSA-SW39B-080819			MSA-SW39C-080819			MSA-SW39D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-9			240-117170-10			240-117170-11			240-117170-12		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C	0.26	UJ	C	0.26	UJ	C	0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW40A-080819			MSA-SW40B-080819			MSA-SW40C-080819			MSA-SW40D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-13			240-117170-14			240-117170-15			240-117170-16		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C	0.26	UJ	C	0.26	UJ	C	0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW41A-080819			MSA-SW41B-080819			MSA-SW41C-080819			MSA-SW41D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-17			240-117170-18			240-117170-19			240-117170-20		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	UJ	C	0.13	UJ	C	0.13	UJ	C	0.13	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C	0.26	UJ	C	0.26	UJ	C	0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW42A-080819			MSA-SW42B-080819			MSA-SW42C-080819			MSA-SW42D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-21			240-117170-22			240-117170-23			240-117170-24		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U		0.13	U		0.13	U		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	UJ	C	0.14	UJ	C	0.14	UJ	C	0.14	UJ	C
1,2,4-TRICHLOROBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW43A-080819			MSA-SW43B-080819			MSA-SW43C-080819			MSA-SW43D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-25			240-117170-26			240-117170-27			240-117170-28		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U		0.13	U		0.13	U		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	UJ	C	0.14	UJ	C	0.14	UJ	C	0.14	UJ	C
1,2,4-TRICHLOROBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW44A-080819			MSA-SW44B-080819			MSA-SW44C-080819			MSA-SW44D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-29			240-117170-30			240-117170-31			240-117170-32		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U		0.13	U		0.13	U		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	UJ	C	0.14	UJ	C	0.14	UJ	C	0.14	UJ	C
1,2,4-TRICHLOROBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW45A-080819			MSA-SW45B-080819			MSA-SW45C-080819			MSA-SW45D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-33			240-117170-34			240-117170-35			240-117170-36		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U		0.13	U		0.13	U		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	UJ	C	0.14	UJ	C	0.14	UJ	C	0.14	UJ	C
1,2,4-TRICHLOROBENZENE		0.26	U		0.26	U		0.26	U		0.26	U	
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW46A-080819			MSA-SW47A-080819			MSA-SW48A-080819			MSA-SW49A-080819		
SDG: 240-117170-1	LAB_ID	240-117170-42			240-117170-43			240-117170-44			240-117170-45		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.14	U		0.14	U		0.14	U		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U		0.13	U		0.13	U		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	UJ	C	0.54	UJ	C	0.54	UJ	C	0.54	UJ	C
1,2,3-TRICHLOROPROPANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C	0.26	UJ	C	0.26	UJ	C	0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U		0.07	U		0.07	U		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2-DICHLOROETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,2-DICHLOROPROPANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.16	U		0.16	U		0.16	U		0.16	U	
2,2-DICHLOROPROPANE		0.31	U		0.31	U		0.31	U		0.31	U	
2-BUTANONE		1.2	U		1.2	U		1.2	U		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M	0.26	UR	M	0.26	UR	M	0.26	UR	M
2-CHLOROTOLUENE		0.15	U		0.15	U		0.15	U		0.15	U	
2-HEXANONE		0.54	U		0.54	U		0.54	U		0.54	U	
4-CHLOROTOLUENE		0.09	U		0.09	U		0.09	U		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
4-METHYL-2-PENTANONE		0.42	U		0.42	U		0.42	U		0.42	U	
ACETONE		5.4	U		5.4	U		5.4	U		5.4	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
BROMOCHLOROMETHANE		0.14	U		0.14	U		0.14	U		0.14	U	
BROMODICHLOROMETHANE		0.17	U		0.17	U		0.17	U		0.17	U	
BROMOFORM		0.76	U		0.76	U		0.76	U		0.76	U	
BROMOMETHANE		0.42	U		0.42	U		0.42	U		0.42	U	

PROJ_NO: 08735	NSAMPLE	TB-080819		
SDG: 240-117170-1	LAB_ID	240-117170-41		
FRACTION: OV	SAMP_DATE	8/8/2019		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.14	U	
1,1,1-TRICHLOROETHANE		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.13	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U	
1,1-DICHLOROETHANE		0.17	U	
1,1-DICHLOROETHENE		0.19	U	
1,1-DICHLOROPROPENE		0.14	U	
1,2,3-TRICHLOROBENZENE		0.54	UJ	C
1,2,3-TRICHLOROPROPANE		0.24	U	
1,2,3-TRIMETHYLBENZENE		0.14	U	
1,2,4-TRICHLOROBENZENE		0.26	UJ	C
1,2,4-TRIMETHYLBENZENE		0.07	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U	
1,2-DIBROMOETHANE		0.12	U	
1,2-DICHLOROBENZENE		0.15	U	
1,2-DICHLOROETHANE		0.21	U	
1,2-DICHLOROPROPANE		0.15	U	
1,3-DICHLOROBENZENE		0.15	U	
1,3-DICHLOROPROPANE		0.21	U	
1,4-DICHLOROBENZENE		0.16	U	
2,2-DICHLOROPROPANE		0.31	U	
2-BUTANONE		1.2	U	
2-CHLOROETHYL VINYL ETHER		0.26	UR	M
2-CHLOROTOLUENE		0.15	U	
2-HEXANONE		0.54	U	
4-CHLOROTOLUENE		0.09	U	
4-ISOPROPYLTOLUENE		0.13	U	
4-METHYL-2-PENTANONE		0.42	U	
ACETONE		5.4	U	
BENZENE		0.13	U	
BROMOBENZENE		0.12	U	
BROMOCHLOROMETHANE		0.14	U	
BROMODICHLOROMETHANE		0.17	U	
BROMOFORM		0.76	U	
BROMOMETHANE		0.42	U	

PROJ_NO: 08735	NSAMPLE	EL-SW01A-080819			EL-SW01B-080819			EL-SW01C-080819			EL-SW01D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-37			240-117170-38			240-117170-39			240-117170-40		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	UJ	C	0.09	UJ	C	0.09	UJ	C	0.09	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW37A-080819			MSA-SW37B-080819			MSA-SW37C-080819			MSA-SW37D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-1			240-117170-2			240-117170-3			240-117170-4		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	U		0.09	U		0.09	U		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW38A-080819			MSA-SW38B-080819			MSA-SW38C-080819			MSA-SW38D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-5			240-117170-6			240-117170-7			240-117170-8		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	U		0.09	U		0.09	U		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW39A-080819			MSA-SW39B-080819			MSA-SW39C-080819			MSA-SW39D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-9			240-117170-10			240-117170-11			240-117170-12		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	U		0.09	U		0.09	U		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW40A-080819			MSA-SW40B-080819			MSA-SW40C-080819			MSA-SW40D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-13			240-117170-14			240-117170-15			240-117170-16		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	U		0.09	U		0.09	U		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW41A-080819			MSA-SW41B-080819			MSA-SW41C-080819			MSA-SW41D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-17			240-117170-18			240-117170-19			240-117170-20		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	U		0.09	U		0.09	U		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW42A-080819			MSA-SW42B-080819			MSA-SW42C-080819			MSA-SW42D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-21			240-117170-22			240-117170-23			240-117170-24		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	UJ	C	0.09	UJ	C	0.09	UJ	C	0.09	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW43A-080819			MSA-SW43B-080819			MSA-SW43C-080819			MSA-SW43D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-25			240-117170-26			240-117170-27			240-117170-28		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	UJ	C	0.09	UJ	C	0.09	UJ	C	0.09	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW44A-080819			MSA-SW44B-080819			MSA-SW44C-080819			MSA-SW44D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-29			240-117170-30			240-117170-31			240-117170-32		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	UJ	C	0.09	UJ	C	0.09	UJ	C	0.09	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	U		0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW45A-080819			MSA-SW45B-080819			MSA-SW45C-080819			MSA-SW45D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-33			240-117170-34			240-117170-35			240-117170-36		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	U		0.2	U		0.2	U		0.2	U	
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	UJ	C	0.09	UJ	C	0.09	UJ	C	0.09	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	U		0.32	U		0.32	U		0.32	U	
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.14	J	P	0.14	U		0.14	U		0.14	U	
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW46A-080819			MSA-SW47A-080819			MSA-SW48A-080819			MSA-SW49A-080819		
SDG: 240-117170-1	LAB_ID	240-117170-42			240-117170-43			240-117170-44			240-117170-45		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U		0.28	U		0.28	U		0.28	U	
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U		0.26	U	
CHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U		0.83	U		0.83	U	
CHLOROFORM		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROMETHANE		0.2	UJ	C	0.2	UJ	C	0.2	UJ	C	0.2	UJ	C
CIS-1,2-DICHLOROETHENE		0.16	U		0.16	U		0.16	U		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.09	U		0.09	U		0.09	U		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U		0.15	U		0.15	U		0.15	U	
ETHYLBENZENE		0.11	U		0.11	U		0.11	U		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.09	U		0.09	U		0.09	U		0.09	U	
M+P-XYLENES		0.08	U		0.08	U		0.08	U		0.1	J	P
METHYL TERT-BUTYL ETHER		0.07	U		0.07	U		0.07	U		0.07	U	
METHYLENE CHLORIDE		2.6	U		2.6	U		2.6	U		2.6	U	
NAPHTHALENE		0.32	UJ	C	0.32	UJ	C	0.32	UJ	C	0.32	UJ	C
N-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
N-PROPYLBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
O-XYLENE		0.09	U		0.09	U		0.09	U		0.09	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE		0.1	U		0.1	U		0.1	U		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-BUTYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C	1.7	UJ	C	1.7	UJ	C	1.7	UJ	C
TETRACHLOROETHENE		0.15	U		0.15	U		0.15	U		0.15	U	
TOLUENE		0.15	J	P	0.14	U		0.14	U		0.21	J	P
TOTAL XYLENES		0.15	U		0.15	U		0.15	U		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.1	U		0.1	U		0.1	U		0.1	U	

PROJ_NO: 08735	NSAMPLE	TB-080819		
SDG: 240-117170-1	LAB_ID	240-117170-41		
FRACTION: OV	SAMP_DATE	8/8/2019		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON DISULFIDE		0.28	U	
CARBON TETRACHLORIDE		0.26	U	
CHLOROBENZENE		0.14	U	
CHLORODIBROMOMETHANE		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q
CHLOROETHANE		0.83	U	
CHLOROFORM		0.13	U	
CHLOROMETHANE		0.2	UJ	C
CIS-1,2-DICHLOROETHENE		0.16	U	
CIS-1,3-DICHLOROPROPENE		0.61	U	
DIBROMOMETHANE		0.09	U	
DICHLORODIFLUOROMETHANE		0.35	U	
DIISOPROPYL ETHER		0.17	U	
ETHYL TERT-BUTYL ETHER		0.15	U	
ETHYLBENZENE		0.11	U	
HEXACHLOROBUTADIENE		0.83	UJ	C
ISOPROPYLBENZENE		0.09	U	
M+P-XYLENES		0.08	U	
METHYL TERT-BUTYL ETHER		0.07	U	
METHYLENE CHLORIDE		2.6	U	
NAPHTHALENE		0.32	UJ	C
N-BUTYLBENZENE		0.14	U	
N-PROPYLBENZENE		0.15	U	
O-XYLENE		0.09	U	
SEC-BUTYLBENZENE		0.13	U	
STYRENE		0.1	U	
TERT-AMYL METHYL ETHER		0.11	U	
TERT-BUTYLBENZENE		0.14	U	
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C
TETRACHLOROETHENE		0.15	U	
TOLUENE		0.14	U	
TOTAL XYLENES		0.15	U	
TRANS-1,2-DICHLOROETHENE		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U	
TRICHLOROETHENE		0.1	U	

PROJ_NO: 08735	NSAMPLE	EL-SW01A-080819			EL-SW01B-080819			EL-SW01C-080819			EL-SW01D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-37			240-117170-38			240-117170-39			240-117170-40		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW37A-080819			MSA-SW37B-080819			MSA-SW37C-080819			MSA-SW37D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-1			240-117170-2			240-117170-3			240-117170-4		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW38A-080819			MSA-SW38B-080819			MSA-SW38C-080819			MSA-SW38D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-5			240-117170-6			240-117170-7			240-117170-8		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW39A-080819			MSA-SW39B-080819			MSA-SW39C-080819			MSA-SW39D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-9			240-117170-10			240-117170-11			240-117170-12		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW40A-080819			MSA-SW40B-080819			MSA-SW40C-080819			MSA-SW40D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-13			240-117170-14			240-117170-15			240-117170-16		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW41A-080819			MSA-SW41B-080819			MSA-SW41C-080819			MSA-SW41D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-17			240-117170-18			240-117170-19			240-117170-20		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW42A-080819			MSA-SW42B-080819			MSA-SW42C-080819			MSA-SW42D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-21			240-117170-22			240-117170-23			240-117170-24		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW43A-080819			MSA-SW43B-080819			MSA-SW43C-080819			MSA-SW43D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-25			240-117170-26			240-117170-27			240-117170-28		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW44A-080819			MSA-SW44B-080819			MSA-SW44C-080819			MSA-SW44D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-29			240-117170-30			240-117170-31			240-117170-32		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW45A-080819			MSA-SW45B-080819			MSA-SW45C-080819			MSA-SW45D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-33			240-117170-34			240-117170-35			240-117170-36		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW46A-080819			MSA-SW47A-080819			MSA-SW48A-080819			MSA-SW49A-080819		
SDG: 240-117170-1	LAB_ID	240-117170-42			240-117170-43			240-117170-44			240-117170-45		
FRACTION: OV	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U		0.45	U		0.45	U		0.45	U	
VINYL ACETATE		0.19	U		0.19	U		0.19	U		0.19	U	
VINYL CHLORIDE		0.2	U		0.2	U		0.2	U		0.2	U	

PROJ_NO: 08735	NSAMPLE	TB-080819		
SDG: 240-117170-1	LAB_ID	240-117170-41		
FRACTION: OV	SAMP_DATE	8/8/2019		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.45	U	
VINYL ACETATE		0.19	U	
VINYL CHLORIDE		0.2	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW37A-080819			MSA-SW37B-080819			MSA-SW37C-080819			MSA-SW37D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-1			240-117170-2			240-117170-3			240-117170-4		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.63	J	P	0.57	U		0.57	U	
ARSENIC		2.2	J	P	2.1	J	P	2.2	J	P	1.9	J	P
BARIUM		11			10			11			11		
BERYLLIUM		0.32	J	P	0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		0.98	U	
COBALT		0.22	J	P	0.21	J	P	0.19	U		0.19	U	
COPPER		4.9			4.8			5.4			5.4		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.4	J	P	1.4	J	P	1.1	U		1.1	U	
NICKEL		1.9	J	P	1.5	J	P	1.6	J	P	1.9	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.38	J	P	0.41	J	P	0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		1.1	J	P	1.1	J	P	1.2	J	P	1	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW38A-080819			MSA-SW38B-080819			MSA-SW38C-080819			MSA-SW38D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-5			240-117170-6			240-117170-7			240-117170-8		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		2.4	J	P	2.2	J	P	2.2	J	P	2.1	J	P
BARIUM		12			11			11			11		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		0.98	U	
COBALT		0.21	J	P	0.19	U		0.19	U		0.19	U	
COPPER		5.8			5.3			5.4			5.1		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		1.7	J	P	1.6	J	P	1.5	J	P	1.5	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		1.2	J	P	1	J	P	0.99	J	P	0.82	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW39A-080819			MSA-SW39B-080819			MSA-SW39C-080819			MSA-SW39D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-9			240-117170-10			240-117170-11			240-117170-12		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		1.9	J	P	1.9	J	P	2	J	P	2.3	J	P
BARIUM		12			12			12			13		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		0.98	U	
COBALT		0.19	U		0.19	U		0.19	U		0.26	J	P
COPPER		5.2			5.2			5.4			6.1		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		1.8	J	P	2			2.4			2.2		
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		0.95	J	P	0.98	J	P	0.92	J	P	1.2	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW40A-080819			MSA-SW40B-080819			MSA-SW40C-080819			MSA-SW40D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-13			240-117170-14			240-117170-15			240-117170-16		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		2.3	J	P	2.1	J	P	2.1	J	P	2.2	J	P
BARIUM		11			11			11			12		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		0.98	U	
COBALT		0.19	U		0.19	U		0.19	U		0.19	U	
COPPER		6			5.5			5.5			6.1		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.4	J	P
NICKEL		2.1			2.1			1.6	J	P	1.7	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		1.1	J	P	0.96	J	P	0.92	J	P	1	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW41A-080819			MSA-SW41B-080819			MSA-SW41C-080819			MSA-SW41D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-17			240-117170-18			240-117170-19			240-117170-20		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		2.1	J	P	2.2	J	P	2	J	P	2.2	J	P
BARIUM		11			11			11			11		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		4.4		
COBALT		0.19	U		0.19	U		0.19	U		0.19	U	
COPPER		5			6			5.2			6		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		1.9	J	P	1.7	J	P	1.6	J	P	1.7	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		0.92	J	P	0.98	J	P	0.85	J	P	1.1	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW42A-080819			MSA-SW42B-080819			MSA-SW42C-080819			MSA-SW42D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-21			240-117170-22			240-117170-23			240-117170-24		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.65	J	P	0.57	U		0.57	U	
ARSENIC		2.3	J	P	2.2	J	P	2.4	J	P	2.4	J	P
BARIUM		12			12			11			12		
BERYLLIUM		0.31	U		0.37	J	P	0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		1.2	J	P	0.98	U		0.98	U		0.98	U	
COBALT		0.25	J	P	0.21	J	P	0.19	U		0.22	J	P
COPPER		5.4			5.7			5.7			6.3		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.5	J	P	1.6	J	P	1.1	J	P	1.1	U	
NICKEL		2			1.8	J	P	1.6	J	P	1.8	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.38	J	P	0.46	J	P	0.2	U		0.2	U	
TUNGSTEN		1.8	U		2.1	J	P	1.8	U		1.8	U	
VANADIUM		1.2	J	P	1.1	J	P	0.98	J	P	1.3	J	P
ZINC		15	U		15	U		20			15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW43A-080819			MSA-SW43B-080819			MSA-SW43C-080819			MSA-SW43D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-25			240-117170-26			240-117170-27			240-117170-28		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		2.2	J	P	2.2	J	P	2.2	J	P	2.2	J	P
BARIUM		12			11			12			12		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		0.98	U	
COBALT		0.19	U		0.19	U		0.19	U		0.19	U	
COPPER		5.4			5.1			5.4			5.6		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		1.7	J	P	1.6	J	P	1.6	J	P	1.7	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		1.1	J	P	0.89	J	P	0.99	J	P	0.97	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW44A-080819			MSA-SW44B-080819			MSA-SW44C-080819			MSA-SW44D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-29			240-117170-30			240-117170-31			240-117170-32		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		1.9	J	P	2.2	J	P	2.2	J	P	2.1	J	P
BARIUM		12			12			12			11		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		0.98	U		0.98	U	
COBALT		0.19	U		0.19	U		0.19	U		0.19	U	
COPPER		5			5.9			6.1			5.3		
LEAD		0.45	U		0.45	U		0.45	U		0.45	U	
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.1	U	
NICKEL		1.6	J	P	1.8	J	P	1.7	J	P	1.5	J	P
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		0.89	J	P	0.9	J	P	0.97	J	P	0.89	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW45A-080819			MSA-SW45B-080819			MSA-SW45C-080819			MSA-SW45D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-33			240-117170-34			240-117170-35			240-117170-36		
FRACTION: M	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.57	U		0.57	U		0.57	U		0.57	U	
ARSENIC		2.1	J	P	2	J	P	2.1	J	P	2.1	J	P
BARIUM		12			12			13			13		
BERYLLIUM		0.31	U		0.31	U		0.31	U		0.31	U	
CADMIUM		0.21	U		0.21	U		0.21	U		0.21	U	
CHROMIUM		0.98	U		0.98	U		1.1	J	P	0.98	U	
COBALT		0.2	J	P	0.19	U		0.2	J	P	0.22	J	P
COPPER		5.5			4.8			5.6			5.9		
LEAD		0.45	U		0.45	U		0.45	U		0.45	J	P
MERCURY		0.13	U		0.13	U		0.13	U		0.13	U	
MOLYBDENUM		1.1	U		1.1	U		1.1	U		1.4	J	P
NICKEL		1.8	J	P	1.7	J	P	2.1			2.6		
SELENIUM		0.89	U		0.89	U		0.89	U		0.89	U	
SILVER		0.053	U		0.053	U		0.053	U		0.053	U	
THALLIUM		0.2	U		0.2	U		0.2	U		0.2	U	
TUNGSTEN		1.8	U		1.8	U		1.8	U		1.8	U	
VANADIUM		1.1	J	P	0.96	J	P	1.1	J	P	1	J	P
ZINC		15	U		15	U		15	U		15	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW37A-080819			MSA-SW37B-080819			MSA-SW37C-080819			MSA-SW37D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-1			240-117170-2			240-117170-3			240-117170-4		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			16			18			18		
DISSOLVED ORGANIC CARBON					3.7								
HARDNESS AS CACO3		110			100			110			110		
MAGNESIUM HARDNESS AS CACO3		93			85			94			95		

PROJ_NO: 08735	NSAMPLE	MSA-SW38A-080819			MSA-SW38B-080819			MSA-SW38C-080819			MSA-SW38D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-5			240-117170-6			240-117170-7			240-117170-8		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			17			17			17		
DISSOLVED ORGANIC CARBON					3.6								
HARDNESS AS CACO3		120			120			120			120		
MAGNESIUM HARDNESS AS CACO3		100			100			100			100		

PROJ_NO: 08735	NSAMPLE	MSA-SW39A-080819			MSA-SW39B-080819			MSA-SW39C-080819			MSA-SW39D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-9			240-117170-10			240-117170-11			240-117170-12		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			18			19			19		
DISSOLVED ORGANIC CARBON					3.3								
HARDNESS AS CACO3		130			130			130			130		
MAGNESIUM HARDNESS AS CACO3		110			110			110			110		

PROJ_NO: 08735	NSAMPLE	MSA-SW40A-080819			MSA-SW40B-080819			MSA-SW40C-080819			MSA-SW40D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-13			240-117170-14			240-117170-15			240-117170-16		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			18			18			18		
DISSOLVED ORGANIC CARBON					3.6								
HARDNESS AS CACO3		120			120			120			120		
MAGNESIUM HARDNESS AS CACO3		100			110			100			110		

PROJ_NO: 08735	NSAMPLE	MSA-SW41A-080819			MSA-SW41B-080819			MSA-SW41C-080819			MSA-SW41D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-17			240-117170-18			240-117170-19			240-117170-20		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			18			17			17		
DISSOLVED ORGANIC CARBON					3.4								
HARDNESS AS CACO3		120			120			120			120		
MAGNESIUM HARDNESS AS CACO3		100			100			100			100		

PROJ_NO: 08735	NSAMPLE	MSA-SW42A-080819			MSA-SW42B-080819			MSA-SW42C-080819			MSA-SW42D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-21			240-117170-22			240-117170-23			240-117170-24		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			18			18			18		
DISSOLVED ORGANIC CARBON					3.5								
HARDNESS AS CACO3		120			120			120			120		
MAGNESIUM HARDNESS AS CACO3		99			100			100			100		

PROJ_NO: 08735	NSAMPLE	MSA-SW43A-080819			MSA-SW43B-080819			MSA-SW43C-080819			MSA-SW43D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-25			240-117170-26			240-117170-27			240-117170-28		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			17			18			18		
DISSOLVED ORGANIC CARBON					3.5								
HARDNESS AS CACO3		120			120			120			120		
MAGNESIUM HARDNESS AS CACO3		110			100			110			110		

PROJ_NO: 08735	NSAMPLE	MSA-SW44A-080819			MSA-SW44B-080819			MSA-SW44C-080819			MSA-SW44D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-29			240-117170-30			240-117170-31			240-117170-32		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			18			18			18		
DISSOLVED ORGANIC CARBON					3.5								
HARDNESS AS CACO3		120			130			130			120		
MAGNESIUM HARDNESS AS CACO3		110			110			110			110		

PROJ_NO: 08735	NSAMPLE	MSA-SW45A-080819			MSA-SW45B-080819			MSA-SW45C-080819			MSA-SW45D-080819		
SDG: 240-117170-1	LAB_ID	240-117170-33			240-117170-34			240-117170-35			240-117170-36		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		18			18			19			19		
DISSOLVED ORGANIC CARBON					3.4								
HARDNESS AS CACO3		120			130			130			130		
MAGNESIUM HARDNESS AS CACO3		110			110			120			110		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01A-080819
Lab Sample ID: 240-117170-37
Matrix: Water
Lab File ID: U1909179.d
Analysis Method: 8260C
Date Collected: 08/08/2019 07:54
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 01:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01A-080819 Lab Sample ID: 240-117170-37

Matrix: Water Lab File ID: U1909179.d

Analysis Method: 8260C Date Collected: 08/08/2019 07:54

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01A-080819
Lab Sample ID: 240-117170-37
Matrix: Water
Lab File ID: U1909179.d
Analysis Method: 8260C
Date Collected: 08/08/2019 07:54
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 01:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01A-080819 Lab Sample ID: 240-117170-37

Matrix: Water Lab File ID: U1909179.d

Analysis Method: 8260C Date Collected: 08/08/2019 07:54

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01A-080819 Lab Sample ID: 240-117170-37

Matrix: Water Lab File ID: U1909179.d

Analysis Method: 8260C Date Collected: 08/08/2019 07:54

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01B-080819
Lab Sample ID: 240-117170-38
Matrix: Water
Lab File ID: U1909180.d
Analysis Method: 8260C
Date Collected: 08/08/2019 07:59
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 02:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01B-080819 Lab Sample ID: 240-117170-38

Matrix: Water Lab File ID: U1909180.d

Analysis Method: 8260C Date Collected: 08/08/2019 07:59

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 02:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01B-080819
Lab Sample ID: 240-117170-38
Matrix: Water
Lab File ID: U1909180.d
Analysis Method: 8260C
Date Collected: 08/08/2019 07:59
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 02:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	104		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01B-080819 Lab Sample ID: 240-117170-38

Matrix: Water Lab File ID: U1909180.d

Analysis Method: 8260C Date Collected: 08/08/2019 07:59

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 02:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01B-080819 Lab Sample ID: 240-117170-38

Matrix: Water Lab File ID: U1909180.d

Analysis Method: 8260C Date Collected: 08/08/2019 07:59

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 02:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01C-080819
Lab Sample ID: 240-117170-39
Matrix: Water
Lab File ID: U1909181.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:01
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 02:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01C-080819 Lab Sample ID: 240-117170-39

Matrix: Water Lab File ID: U1909181.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:01

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 02:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01C-080819
Lab Sample ID: 240-117170-39
Matrix: Water
Lab File ID: U1909181.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:01
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 02:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01C-080819 Lab Sample ID: 240-117170-39

Matrix: Water Lab File ID: U1909181.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:01

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 02:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01C-080819 Lab Sample ID: 240-117170-39

Matrix: Water Lab File ID: U1909181.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:01

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 02:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01D-080819
Lab Sample ID: 240-117170-40
Matrix: Water
Lab File ID: U1909182.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:04
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 03:01
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.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01D-080819 Lab Sample ID: 240-117170-40

Matrix: Water Lab File ID: U1909182.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:04

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 03:01

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.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: EL-SW01D-080819
Lab Sample ID: 240-117170-40
Matrix: Water
Lab File ID: U1909182.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:04
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 03:01
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.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	106		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01D-080819 Lab Sample ID: 240-117170-40

Matrix: Water Lab File ID: U1909182.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:04

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 03:01

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.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: EL-SW01D-080819 Lab Sample ID: 240-117170-40

Matrix: Water Lab File ID: U1909182.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:04

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 03:01

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.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW37A-080819
Lab Sample ID: 240-117170-1
Matrix: Water
Lab File ID: U1909137.d
Analysis Method: 8260C
Date Collected: 08/08/2019 11:02
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 20:07
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37A-080819 Lab Sample ID: 240-117170-1

Matrix: Water Lab File ID: U1909137.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:02

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW37A-080819
Lab Sample ID: 240-117170-1
Matrix: Water
Lab File ID: U1909137.d
Analysis Method: 8260C
Date Collected: 08/08/2019 11:02
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 20:07
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37A-080819 Lab Sample ID: 240-117170-1

Matrix: Water Lab File ID: U1909137.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:02

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37A-080819 Lab Sample ID: 240-117170-1

Matrix: Water Lab File ID: U1909137.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:02

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton | Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37B-080819 | Lab Sample ID: 240-117170-2

Matrix: Water | Lab File ID: U1909138.d

Analysis Method: 8260C | Date Collected: 08/08/2019 11:06

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2019 20:29

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 395620 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37B-080819 Lab Sample ID: 240-117170-2

Matrix: Water Lab File ID: U1909138.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:06

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW37B-080819
Lab Sample ID: 240-117170-2
Matrix: Water
Lab File ID: U1909138.d
Analysis Method: 8260C
Date Collected: 08/08/2019 11:06
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 20:29
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37B-080819 Lab Sample ID: 240-117170-2

Matrix: Water Lab File ID: U1909138.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:06

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37B-080819 Lab Sample ID: 240-117170-2

Matrix: Water Lab File ID: U1909138.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:06

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW37C-080819
Lab Sample ID: 240-117170-3
Matrix: Water
Lab File ID: U1909139.d
Analysis Method: 8260C
Date Collected: 08/08/2019 11:11
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 20:51
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37C-080819 Lab Sample ID: 240-117170-3

Matrix: Water Lab File ID: U1909139.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:11

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:51

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW37C-080819
Lab Sample ID: 240-117170-3
Matrix: Water
Lab File ID: U1909139.d
Analysis Method: 8260C
Date Collected: 08/08/2019 11:11
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 20:51
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37C-080819 Lab Sample ID: 240-117170-3

Matrix: Water Lab File ID: U1909139.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:11

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:51

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37C-080819 Lab Sample ID: 240-117170-3

Matrix: Water Lab File ID: U1909139.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:11

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 20:51

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.: 395620 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37D-080819 Lab Sample ID: 240-117170-4

Matrix: Water Lab File ID: U1909140.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:14

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37D-080819 Lab Sample ID: 240-117170-4

Matrix: Water Lab File ID: U1909140.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:14

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW37D-080819
Lab Sample ID: 240-117170-4
Matrix: Water
Lab File ID: U1909140.d
Analysis Method: 8260C
Date Collected: 08/08/2019 11:15
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 21:14
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	104		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37D-080819 Lab Sample ID: 240-117170-4

Matrix: Water Lab File ID: U1909140.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:14

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW37D-080819 Lab Sample ID: 240-117170-4

Matrix: Water Lab File ID: U1909140.d

Analysis Method: 8260C Date Collected: 08/08/2019 11:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:14

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.: 395620 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38A-080819
Lab Sample ID: 240-117170-5
Matrix: Water
Lab File ID: U1909141.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:01
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 21:36
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38A-080819
Lab Sample ID: 240-117170-5
Matrix: Water
Lab File ID: U1909141.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:01
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 21:36
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38A-080819
Lab Sample ID: 240-117170-5
Matrix: Water
Lab File ID: U1909141.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:01
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 21:36
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	97		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38A-080819 Lab Sample ID: 240-117170-5

Matrix: Water Lab File ID: U1909141.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:01

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:36

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38A-080819 Lab Sample ID: 240-117170-5

Matrix: Water Lab File ID: U1909141.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:01

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:36

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38B-080819
Lab Sample ID: 240-117170-6
Matrix: Water
Lab File ID: U1909142.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:05
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 21:59
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38B-080819 Lab Sample ID: 240-117170-6

Matrix: Water Lab File ID: U1909142.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:05

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:59

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38B-080819
Lab Sample ID: 240-117170-6
Matrix: Water
Lab File ID: U1909142.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:05
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 21:59
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38B-080819 Lab Sample ID: 240-117170-6

Matrix: Water Lab File ID: U1909142.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:05

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:59

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38B-080819 Lab Sample ID: 240-117170-6

Matrix: Water Lab File ID: U1909142.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:05

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 21:59

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.: MSA-SW38C-080819 L.C. 10/02/19

Client Sample ID: ~~MSA-SW38C080819~~ Lab Sample ID: 240-117170-7

Matrix: Water Lab File ID: U1909143.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 22:21

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.: MSA-SW38C-080819 L.C. 10/02/19
Client Sample ID: ~~MSA-SW38C080819~~
Lab Sample ID: 240-117170-7
Matrix: Water
Lab File ID: U1909143.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:10
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 22:21
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.: MSA-SW38C-080819 L.C. 10/02/19
Client Sample ID: ~~MSA-SW38C080819~~
Lab Sample ID: 240-117170-7
Matrix: Water
Lab File ID: U1909143.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:10
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 22:21
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.: MSA-SW38C-080819 L.C. 10/02/19

Client Sample ID: ~~MSA-SW38C080819~~ Lab Sample ID: 240-117170-7

Matrix: Water Lab File ID: U1909143.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 22:21

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.: MSA-SW38C-080819 L.C. 10/02/19

Client Sample ID: ~~MSA-SW38C080819~~ Lab Sample ID: 240-117170-7

Matrix: Water Lab File ID: U1909143.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 22:21

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38D-080819
Lab Sample ID: 240-117170-8
Matrix: Water
Lab File ID: U1909144.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:15
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 22:44
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38D-080819
Lab Sample ID: 240-117170-8
Matrix: Water
Lab File ID: U1909144.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:15
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 22:44
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW38D-080819
Lab Sample ID: 240-117170-8
Matrix: Water
Lab File ID: U1909144.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:15
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 22:44
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38D-080819 Lab Sample ID: 240-117170-8

Matrix: Water Lab File ID: U1909144.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 22:44

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW38D-080819 Lab Sample ID: 240-117170-8

Matrix: Water Lab File ID: U1909144.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 22:44

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton | Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39A-080819 | Lab Sample ID: 240-117170-9

Matrix: Water | Lab File ID: U1909145.d

Analysis Method: 8260C | Date Collected: 08/08/2019 08:11

Sample wt/vol: 5(mL) | Date Analyzed: 08/12/2019 23:07

Soil Aliquot Vol: | Dilution Factor: 1

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

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

Analysis Batch No.: 395620 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39A-080819 Lab Sample ID: 240-117170-9

Matrix: Water Lab File ID: U1909145.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:11

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW39A-080819
Lab Sample ID: 240-117170-9
Matrix: Water
Lab File ID: U1909145.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:11
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 23:07
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	104		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39A-080819 Lab Sample ID: 240-117170-9

Matrix: Water Lab File ID: U1909145.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:11

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39A-080819 Lab Sample ID: 240-117170-9

Matrix: Water Lab File ID: U1909145.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:11

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39B-080819 Lab Sample ID: 240-117170-10

Matrix: Water Lab File ID: U1909146.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:18

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:29

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39B-080819 Lab Sample ID: 240-117170-10

Matrix: Water Lab File ID: U1909146.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:18

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:29

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW39B-080819
Lab Sample ID: 240-117170-10
Matrix: Water
Lab File ID: U1909146.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:18
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 23:29
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	99		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39B-080819 Lab Sample ID: 240-117170-10

Matrix: Water Lab File ID: U1909146.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:18

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:29

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39B-080819 Lab Sample ID: 240-117170-10

Matrix: Water Lab File ID: U1909146.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:18

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:29

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39C-080819 Lab Sample ID: 240-117170-11

Matrix: Water Lab File ID: U1909147.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:24

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:51

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39C-080819 Lab Sample ID: 240-117170-11

Matrix: Water Lab File ID: U1909147.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:24

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:51

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW39C-080819
Lab Sample ID: 240-117170-11
Matrix: Water
Lab File ID: U1909147.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:24
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 23:51
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	97		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39C-080819 Lab Sample ID: 240-117170-11

Matrix: Water Lab File ID: U1909147.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:24

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:51

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39C-080819 Lab Sample ID: 240-117170-11

Matrix: Water Lab File ID: U1909147.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:24

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 23:51

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.: 395620 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW39D-080819
Lab Sample ID: 240-117170-12
Matrix: Water
Lab File ID: U1909148.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:31
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:14
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW39D-080819
Lab Sample ID: 240-117170-12
Matrix: Water
Lab File ID: U1909148.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:31
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:14
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW39D-080819
Lab Sample ID: 240-117170-12
Matrix: Water
Lab File ID: U1909148.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:31
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:14
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39D-080819 Lab Sample ID: 240-117170-12

Matrix: Water Lab File ID: U1909148.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:31

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 00:14

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW39D-080819 Lab Sample ID: 240-117170-12

Matrix: Water Lab File ID: U1909148.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:31

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 00:14

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40A-080819
Lab Sample ID: 240-117170-13
Matrix: Water
Lab File ID: U1909149.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:23
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:36
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40A-080819
Lab Sample ID: 240-117170-13
Matrix: Water
Lab File ID: U1909149.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:23
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:36
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40A-080819
Lab Sample ID: 240-117170-13
Matrix: Water
Lab File ID: U1909149.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:23
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:36
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40A-080819 Lab Sample ID: 240-117170-13

Matrix: Water Lab File ID: U1909149.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 00:36

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40A-080819 Lab Sample ID: 240-117170-13

Matrix: Water Lab File ID: U1909149.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 00:36

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40B-080819
Lab Sample ID: 240-117170-14
Matrix: Water
Lab File ID: U1909150.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:26
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:58
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40B-080819
Lab Sample ID: 240-117170-14
Matrix: Water
Lab File ID: U1909150.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:26
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:58
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40B-080819
Lab Sample ID: 240-117170-14
Matrix: Water
Lab File ID: U1909150.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:26
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 00:58
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-121
460-00-4	4-Bromofluorobenzene (Surr)	99		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	104		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40B-080819 Lab Sample ID: 240-117170-14

Matrix: Water Lab File ID: U1909150.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:26

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 00:58

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40B-080819 Lab Sample ID: 240-117170-14

Matrix: Water Lab File ID: U1909150.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:26

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 00:58

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40C-080819 Lab Sample ID: 240-117170-15

Matrix: Water Lab File ID: U1909151.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:31

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:21

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40C-080819 Lab Sample ID: 240-117170-15

Matrix: Water Lab File ID: U1909151.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:31

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:21

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40C-080819
Lab Sample ID: 240-117170-15
Matrix: Water
Lab File ID: U1909151.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:31
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 01:21
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40C-080819 Lab Sample ID: 240-117170-15

Matrix: Water Lab File ID: U1909151.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:31

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:21

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40C-080819 Lab Sample ID: 240-117170-15

Matrix: Water Lab File ID: U1909151.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:31

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:21

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40D-080819
Lab Sample ID: 240-117170-16
Matrix: Water
Lab File ID: U1909152.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:35
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 01:43
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40D-080819 Lab Sample ID: 240-117170-16

Matrix: Water Lab File ID: U1909152.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:43

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW40D-080819
Lab Sample ID: 240-117170-16
Matrix: Water
Lab File ID: U1909152.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:35
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 01:43
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	93		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40D-080819 Lab Sample ID: 240-117170-16

Matrix: Water Lab File ID: U1909152.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:43

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW40D-080819 Lab Sample ID: 240-117170-16

Matrix: Water Lab File ID: U1909152.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:35

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 01:43

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41A-080819 Lab Sample ID: 240-117170-17

Matrix: Water Lab File ID: U1909153.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:37

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:06

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41A-080819
Lab Sample ID: 240-117170-17
Matrix: Water
Lab File ID: U1909153.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:37
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 02:06
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41A-080819
Lab Sample ID: 240-117170-17
Matrix: Water
Lab File ID: U1909153.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:37
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 02:06
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	91		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41A-080819 Lab Sample ID: 240-117170-17

Matrix: Water Lab File ID: U1909153.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:37

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:06

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41A-080819 Lab Sample ID: 240-117170-17

Matrix: Water Lab File ID: U1909153.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:37

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:06

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41B-080819
Lab Sample ID: 240-117170-18
Matrix: Water
Lab File ID: U1909154.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:40
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 02:28
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41B-080819 Lab Sample ID: 240-117170-18

Matrix: Water Lab File ID: U1909154.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:28

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41B-080819
Lab Sample ID: 240-117170-18
Matrix: Water
Lab File ID: U1909154.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:40
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 02:28
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41B-080819 Lab Sample ID: 240-117170-18

Matrix: Water Lab File ID: U1909154.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:28

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41B-080819 Lab Sample ID: 240-117170-18

Matrix: Water Lab File ID: U1909154.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:28

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.: 395620 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41C-080819
Lab Sample ID: 240-117170-19
Matrix: Water
Lab File ID: U1909155.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:46
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 02:51
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41C-080819 Lab Sample ID: 240-117170-19

Matrix: Water Lab File ID: U1909155.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:51

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41C-080819
Lab Sample ID: 240-117170-19
Matrix: Water
Lab File ID: U1909155.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:46
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 02:51
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41C-080819 Lab Sample ID: 240-117170-19

Matrix: Water Lab File ID: U1909155.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:51

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41C-080819 Lab Sample ID: 240-117170-19

Matrix: Water Lab File ID: U1909155.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 02:51

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41D-080819
Lab Sample ID: 240-117170-20
Matrix: Water
Lab File ID: U1909156.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:49
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 03:13
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41D-080819 Lab Sample ID: 240-117170-20

Matrix: Water Lab File ID: U1909156.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:49

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 03:13

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.: 395620 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW41D-080819
Lab Sample ID: 240-117170-20
Matrix: Water
Lab File ID: U1909156.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:49
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 03:13
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.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41D-080819 Lab Sample ID: 240-117170-20

Matrix: Water Lab File ID: U1909156.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:49

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 03:13

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.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW41D-080819 Lab Sample ID: 240-117170-20

Matrix: Water Lab File ID: U1909156.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:49

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 03:13

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.: 395620 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42A-080819
Lab Sample ID: 240-117170-21
Matrix: Water
Lab File ID: U1909163.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:43
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 19:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42A-080819
Lab Sample ID: 240-117170-21
Matrix: Water
Lab File ID: U1909163.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:43
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 19:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42A-080819
Lab Sample ID: 240-117170-21
Matrix: Water
Lab File ID: U1909163.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:43
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 19:53
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42A-080819 Lab Sample ID: 240-117170-21

Matrix: Water Lab File ID: U1909163.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:43

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 19:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42A-080819 Lab Sample ID: 240-117170-21

Matrix: Water Lab File ID: U1909163.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:43

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 19:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42B-080819
Lab Sample ID: 240-117170-22
Matrix: Water
Lab File ID: U1909164.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:47
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 20:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42B-080819 Lab Sample ID: 240-117170-22

Matrix: Water Lab File ID: U1909164.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:47

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 20:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42B-080819
Lab Sample ID: 240-117170-22
Matrix: Water
Lab File ID: U1909164.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:47
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 20:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-121
460-00-4	4-Bromofluorobenzene (Surr)	93		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42B-080819 Lab Sample ID: 240-117170-22

Matrix: Water Lab File ID: U1909164.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:47

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 20:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42B-080819 Lab Sample ID: 240-117170-22

Matrix: Water Lab File ID: U1909164.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:47

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 20:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42C-080819
Lab Sample ID: 240-117170-23
Matrix: Water
Lab File ID: U1909165.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:52
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 20:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42C-080819 Lab Sample ID: 240-117170-23

Matrix: Water Lab File ID: U1909165.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:52

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 20:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42C-080819
Lab Sample ID: 240-117170-23
Matrix: Water
Lab File ID: U1909165.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:52
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 20:38
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	97		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42C-080819 Lab Sample ID: 240-117170-23

Matrix: Water Lab File ID: U1909165.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:52

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 20:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42C-080819 Lab Sample ID: 240-117170-23

Matrix: Water Lab File ID: U1909165.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:52

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 20:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42D-080819
Lab Sample ID: 240-117170-24
Matrix: Water
Lab File ID: U1909166.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 21:00
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42D-080819 Lab Sample ID: 240-117170-24

Matrix: Water Lab File ID: U1909166.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:56

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW42D-080819
Lab Sample ID: 240-117170-24
Matrix: Water
Lab File ID: U1909166.d
Analysis Method: 8260C
Date Collected: 08/08/2019 10:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 21:00
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42D-080819 Lab Sample ID: 240-117170-24

Matrix: Water Lab File ID: U1909166.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:56

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW42D-080819 Lab Sample ID: 240-117170-24

Matrix: Water Lab File ID: U1909166.d

Analysis Method: 8260C Date Collected: 08/08/2019 10:56

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43A-080819
Lab Sample ID: 240-117170-25
Matrix: Water
Lab File ID: U1909167.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:16
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 21:23
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43A-080819 Lab Sample ID: 240-117170-25

Matrix: Water Lab File ID: U1909167.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:16

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:23

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43A-080819
Lab Sample ID: 240-117170-25
Matrix: Water
Lab File ID: U1909167.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:16
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 21:23
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	91		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43A-080819 Lab Sample ID: 240-117170-25

Matrix: Water Lab File ID: U1909167.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:16

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:23

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43A-080819 Lab Sample ID: 240-117170-25

Matrix: Water Lab File ID: U1909167.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:16

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:23

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43B-080819
Lab Sample ID: 240-117170-26
Matrix: Water
Lab File ID: U1909168.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:20
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 21:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43B-080819 Lab Sample ID: 240-117170-26

Matrix: Water Lab File ID: U1909168.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43B-080819
Lab Sample ID: 240-117170-26
Matrix: Water
Lab File ID: U1909168.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:20
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 21:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	98		70-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43B-080819 Lab Sample ID: 240-117170-26

Matrix: Water Lab File ID: U1909168.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43B-080819 Lab Sample ID: 240-117170-26

Matrix: Water Lab File ID: U1909168.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 21:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43C-080819
Lab Sample ID: 240-117170-27
Matrix: Water
Lab File ID: U1909169.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:23
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 22:08
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43C-080819 Lab Sample ID: 240-117170-27

Matrix: Water Lab File ID: U1909169.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:23

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43C-080819
Lab Sample ID: 240-117170-27
Matrix: Water
Lab File ID: U1909169.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:23
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 22:08
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	93		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43C-080819 Lab Sample ID: 240-117170-27

Matrix: Water Lab File ID: U1909169.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:23

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43C-080819 Lab Sample ID: 240-117170-27

Matrix: Water Lab File ID: U1909169.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:23

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43D-080819
Lab Sample ID: 240-117170-28
Matrix: Water
Lab File ID: U1909170.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:26
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 22:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43D-080819 Lab Sample ID: 240-117170-28

Matrix: Water Lab File ID: U1909170.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:26

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW43D-080819
Lab Sample ID: 240-117170-28
Matrix: Water
Lab File ID: U1909170.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:26
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 22:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43D-080819 Lab Sample ID: 240-117170-28

Matrix: Water Lab File ID: U1909170.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:26

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW43D-080819 Lab Sample ID: 240-117170-28

Matrix: Water Lab File ID: U1909170.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:26

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44A-080819
Lab Sample ID: 240-117170-29
Matrix: Water
Lab File ID: U1909171.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 22:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44A-080819 Lab Sample ID: 240-117170-29

Matrix: Water Lab File ID: U1909171.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:56

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44A-080819
Lab Sample ID: 240-117170-29
Matrix: Water
Lab File ID: U1909171.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 22:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44A-080819 Lab Sample ID: 240-117170-29

Matrix: Water Lab File ID: U1909171.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:56

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44A-080819 Lab Sample ID: 240-117170-29

Matrix: Water Lab File ID: U1909171.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:56

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 22:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44B-080819 Lab Sample ID: 240-117170-30

Matrix: Water Lab File ID: U1909172.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:01

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 23:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44B-080819 Lab Sample ID: 240-117170-30

Matrix: Water Lab File ID: U1909172.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:01

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 23:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44B-080819
Lab Sample ID: 240-117170-30
Matrix: Water
Lab File ID: U1909172.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:01
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 23:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		70-121
460-00-4	4-Bromofluorobenzene (Surr)	99		59-120
2037-26-5	Toluene-d8 (Surr)	107		70-123
1868-53-7	Dibromofluoromethane (Surr)	107		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44B-080819 Lab Sample ID: 240-117170-30

Matrix: Water Lab File ID: U1909172.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:01

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 23:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44B-080819 Lab Sample ID: 240-117170-30

Matrix: Water Lab File ID: U1909172.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:01

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 23:15

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44C-080819
Lab Sample ID: 240-117170-31
Matrix: Water
Lab File ID: U1909173.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:05
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 23:37
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.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44C-080819
Lab Sample ID: 240-117170-31
Matrix: Water
Lab File ID: U1909173.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:05
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 23:37
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.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44C-080819
Lab Sample ID: 240-117170-31
Matrix: Water
Lab File ID: U1909173.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:05
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 23:37
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.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	99		70-123
1868-53-7	Dibromofluoromethane (Surr)	104		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44C-080819 Lab Sample ID: 240-117170-31

Matrix: Water Lab File ID: U1909173.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 23:37

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.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44C-080819 Lab Sample ID: 240-117170-31

Matrix: Water Lab File ID: U1909173.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 23:37

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.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44D-080819
Lab Sample ID: 240-117170-32
Matrix: Water
Lab File ID: U1909174.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:09
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:00
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44D-080819
Lab Sample ID: 240-117170-32
Matrix: Water
Lab File ID: U1909174.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:09
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:00
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW44D-080819
Lab Sample ID: 240-117170-32
Matrix: Water
Lab File ID: U1909174.d
Analysis Method: 8260C
Date Collected: 08/08/2019 09:09
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:00
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-121
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44D-080819 Lab Sample ID: 240-117170-32

Matrix: Water Lab File ID: U1909174.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:09

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW44D-080819 Lab Sample ID: 240-117170-32

Matrix: Water Lab File ID: U1909174.d

Analysis Method: 8260C Date Collected: 08/08/2019 09:09

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45A-080819
Lab Sample ID: 240-117170-33
Matrix: Water
Lab File ID: U1909175.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:37
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:22
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45A-080819 Lab Sample ID: 240-117170-33

Matrix: Water Lab File ID: U1909175.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:37

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	0.14	J	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45A-080819
Lab Sample ID: 240-117170-33
Matrix: Water
Lab File ID: U1909175.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:37
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:22
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45A-080819 Lab Sample ID: 240-117170-33

Matrix: Water Lab File ID: U1909175.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:37

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45A-080819 Lab Sample ID: 240-117170-33

Matrix: Water Lab File ID: U1909175.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:37

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:22

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45B-080819
Lab Sample ID: 240-117170-34
Matrix: Water
Lab File ID: U1909176.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:40
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45B-080819 Lab Sample ID: 240-117170-34

Matrix: Water Lab File ID: U1909176.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:40

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45B-080819
Lab Sample ID: 240-117170-34
Matrix: Water
Lab File ID: U1909176.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:40
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 00:45
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45B-080819 Lab Sample ID: 240-117170-34

Matrix: Water Lab File ID: U1909176.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:40

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45B-080819 Lab Sample ID: 240-117170-34

Matrix: Water Lab File ID: U1909176.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:40

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 00:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45C-080819
Lab Sample ID: 240-117170-35
Matrix: Water
Lab File ID: U1909177.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:47
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 01:07
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45C-080819 Lab Sample ID: 240-117170-35

Matrix: Water Lab File ID: U1909177.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45C-080819
Lab Sample ID: 240-117170-35
Matrix: Water
Lab File ID: U1909177.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:47
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 01:07
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45C-080819 Lab Sample ID: 240-117170-35

Matrix: Water Lab File ID: U1909177.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45C-080819 Lab Sample ID: 240-117170-35

Matrix: Water Lab File ID: U1909177.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:07

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45D-080819
Lab Sample ID: 240-117170-36
Matrix: Water
Lab File ID: U1909178.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:49
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 01:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45D-080819 Lab Sample ID: 240-117170-36

Matrix: Water Lab File ID: U1909178.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:49

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW45D-080819
Lab Sample ID: 240-117170-36
Matrix: Water
Lab File ID: U1909178.d
Analysis Method: 8260C
Date Collected: 08/08/2019 08:49
Sample wt/vol: 5(mL)
Date Analyzed: 08/14/2019 01:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
2037-26-5	Toluene-d8 (Surr)	102		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45D-080819 Lab Sample ID: 240-117170-36

Matrix: Water Lab File ID: U1909178.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:49

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW45D-080819 Lab Sample ID: 240-117170-36

Matrix: Water Lab File ID: U1909178.d

Analysis Method: 8260C Date Collected: 08/08/2019 08:49

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2019 01:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton | Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW46A-080819 | Lab Sample ID: 240-117170-42

Matrix: Water | Lab File ID: U1272410.D

Analysis Method: 8260C | Date Collected: 08/08/2019 10:39

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2019 20:01

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.: 396858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW46A-080819 Lab Sample ID: 240-117170-42

Matrix: Water Lab File ID: U1272410.D

Analysis Method: 8260C Date Collected: 08/08/2019 10:39

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:01

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.: 396858 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	0.15	J	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW46A-080819
Lab Sample ID: 240-117170-42
Matrix: Water
Lab File ID: U1272410.D
Analysis Method: 8260C
Date Collected: 08/08/2019 10:39
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 20:01
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.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-121
460-00-4	4-Bromofluorobenzene (Surr)	88		59-120
2037-26-5	Toluene-d8 (Surr)	91		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW46A-080819 Lab Sample ID: 240-117170-42

Matrix: Water Lab File ID: U1272410.D

Analysis Method: 8260C Date Collected: 08/08/2019 10:39

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:01

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.: 396858 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW46A-080819 Lab Sample ID: 240-117170-42

Matrix: Water Lab File ID: U1272410.D

Analysis Method: 8260C Date Collected: 08/08/2019 10:39

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:01

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.: 396858 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW47A-080819
Lab Sample ID: 240-117170-43
Matrix: Water
Lab File ID: U1272411.D
Analysis Method: 8260C
Date Collected: 08/08/2019 10:18
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 20:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW47A-080819 Lab Sample ID: 240-117170-43

Matrix: Water Lab File ID: U1272411.D

Analysis Method: 8260C Date Collected: 08/08/2019 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:24

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW47A-080819
Lab Sample ID: 240-117170-43
Matrix: Water
Lab File ID: U1272411.D
Analysis Method: 8260C
Date Collected: 08/08/2019 10:18
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 20:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	91		59-120
2037-26-5	Toluene-d8 (Surr)	89		70-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW47A-080819 Lab Sample ID: 240-117170-43

Matrix: Water Lab File ID: U1272411.D

Analysis Method: 8260C Date Collected: 08/08/2019 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:24

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW47A-080819 Lab Sample ID: 240-117170-43

Matrix: Water Lab File ID: U1272411.D

Analysis Method: 8260C Date Collected: 08/08/2019 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:24

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW48A-080819
Lab Sample ID: 240-117170-44
Matrix: Water
Lab File ID: U1272412.D
Analysis Method: 8260C
Date Collected: 08/08/2019 09:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 20:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW48A-080819
Lab Sample ID: 240-117170-44
Matrix: Water
Lab File ID: U1272412.D
Analysis Method: 8260C
Date Collected: 08/08/2019 09:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 20:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW48A-080819
Lab Sample ID: 240-117170-44
Matrix: Water
Lab File ID: U1272412.D
Analysis Method: 8260C
Date Collected: 08/08/2019 09:56
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 20:47
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-121
460-00-4	4-Bromofluorobenzene (Surr)	91		59-120
2037-26-5	Toluene-d8 (Surr)	91		70-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW48A-080819 Lab Sample ID: 240-117170-44

Matrix: Water Lab File ID: U1272412.D

Analysis Method: 8260C Date Collected: 08/08/2019 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW48A-080819 Lab Sample ID: 240-117170-44

Matrix: Water Lab File ID: U1272412.D

Analysis Method: 8260C Date Collected: 08/08/2019 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 20:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton | Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW49A-080819 | Lab Sample ID: 240-117170-45

Matrix: Water | Lab File ID: U1272413.D

Analysis Method: 8260C | Date Collected: 08/08/2019 09:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/20/2019 21:10

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.: 396858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW49A-080819 Lab Sample ID: 240-117170-45

Matrix: Water Lab File ID: U1272413.D

Analysis Method: 8260C Date Collected: 08/08/2019 09:32

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 21:10

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.: 396858 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	0.10	J	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	0.21	J	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW49A-080819
Lab Sample ID: 240-117170-45
Matrix: Water
Lab File ID: U1272413.D
Analysis Method: 8260C
Date Collected: 08/08/2019 09:32
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 21:10
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.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	88		59-120
2037-26-5	Toluene-d8 (Surr)	90		70-123
1868-53-7	Dibromofluoromethane (Surr)	95		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW49A-080819 Lab Sample ID: 240-117170-45

Matrix: Water Lab File ID: U1272413.D

Analysis Method: 8260C Date Collected: 08/08/2019 09:32

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 21:10

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.: 396858 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW49A-080819 Lab Sample ID: 240-117170-45

Matrix: Water Lab File ID: U1272413.D

Analysis Method: 8260C Date Collected: 08/08/2019 09:32

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 21:10

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.: 396858 Units: ug/L

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

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: TB-080819
Lab Sample ID: 240-117170-41
Matrix: Water
Lab File ID: U1272409.D
Analysis Method: 8260C
Date Collected: 08/08/2019 00:00
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 19:39
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.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: TB-080819 Lab Sample ID: 240-117170-41

Matrix: Water Lab File ID: U1272409.D

Analysis Method: 8260C Date Collected: 08/08/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 19:39

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.: 396858 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: TB-080819
Lab Sample ID: 240-117170-41
Matrix: Water
Lab File ID: U1272409.D
Analysis Method: 8260C
Date Collected: 08/08/2019 00:00
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 19:39
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.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-121
460-00-4	4-Bromofluorobenzene (Surr)	88		59-120
2037-26-5	Toluene-d8 (Surr)	90		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: TB-080819 Lab Sample ID: 240-117170-41

Matrix: Water Lab File ID: U1272409.D

Analysis Method: 8260C Date Collected: 08/08/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 19:39

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.: 396858 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: TB-080819 Lab Sample ID: 240-117170-41

Matrix: Water Lab File ID: U1272409.D

Analysis Method: 8260C Date Collected: 08/08/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 19:39

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.: 396858 Units: ug/L

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

FORM I-TIC 8260C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37A-080819
Lab Sample ID: 240-117170-1
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:02
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	0.32	1.0	0.31	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.22	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	4.9	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	1.9	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	0.38	1.0	0.20	ug/L	J		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37A-080819
Lab Sample ID: 240-117170-1
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:02
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	110	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	93	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37B-080819
Lab Sample ID: 240-117170-2
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:06
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.63	2.0	0.57	ug/L	J		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	10	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.21	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	4.8	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	1.5	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	0.41	1.0	0.20	ug/L	J		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37B-080819
Lab Sample ID: 240-117170-2
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:06
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	100	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	16	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	85	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37C-080819
Lab Sample ID: 240-117170-3
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:11
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.2	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37C-080819

Lab Sample ID: 240-117170-3

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 11:11

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	110	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	94	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37D-080819
Lab Sample ID: 240-117170-4
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:15
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	1.9	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.9	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.0	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37D-080819
Lab Sample ID: 240-117170-4
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:15
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	110	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	95	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38A-080819
Lab Sample ID: 240-117170-5
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:01
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.4	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.21	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.8	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.2	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38A-080819
Lab Sample ID: 240-117170-5
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:01
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38B-080819
Lab Sample ID: 240-117170-6
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:05
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.3	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.0	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38B-080819

Lab Sample ID: 240-117170-6

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 10:05

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	17	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

MSA-SW38C-080819 L.C. 10/02/19

Client Sample ID: ~~MSA-SW38C080819~~ Lab Sample ID: 240-117170-7

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG ID.:

Matrix: Water Date Sampled: 08/08/2019 10:10

Reporting Basis: WET Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.5	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.99	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

MSA-SW38C-080819 L.C. 10/02/19

Client Sample ID: ~~MSA-SW38C080819~~ Lab Sample ID: 240-117170-7

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG ID.:

Matrix: Water Date Sampled: 08/08/2019 10:10

Reporting Basis: WET Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	17	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38D-080819
Lab Sample ID: 240-117170-8
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:15
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.1	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.5	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.82	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW38D-080819
Lab Sample ID: 240-117170-8
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:15
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	17	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39A-080819
Lab Sample ID: 240-117170-9
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:11
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	1.9	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.2	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.8	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.95	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39A-080819

Lab Sample ID: 240-117170-9

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 08:11

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39B-080819
Lab Sample ID: 240-117170-10
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:18
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	1.9	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.2	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	2.0	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.98	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39B-080819

Lab Sample ID: 240-117170-10

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 08:18

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39C-080819
Lab Sample ID: 240-117170-11
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:24
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.0	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	2.4	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.92	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39C-080819
Lab Sample ID: 240-117170-11
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:24
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	19	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39D-080819
Lab Sample ID: 240-117170-12
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:31
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.3	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	13	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.26	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	6.1	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	2.2	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.2	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW39D-080819
Lab Sample ID: 240-117170-12
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:31
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	19	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40A-080819
Lab Sample ID: 240-117170-13
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:23
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.3	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	6.0	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	2.1	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40A-080819
Lab Sample ID: 240-117170-13
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:23
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40B-080819
Lab Sample ID: 240-117170-14
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:26
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.5	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	2.1	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.96	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40B-080819
Lab Sample ID: 240-117170-14
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:26
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40C-080819
Lab Sample ID: 240-117170-15
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:31
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.5	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.92	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40C-080819
Lab Sample ID: 240-117170-15
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:31
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40D-080819
Lab Sample ID: 240-117170-16
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:35
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	6.1	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.4	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.0	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW40D-080819
Lab Sample ID: 240-117170-16
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:35
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41A-080819
Lab Sample ID: 240-117170-17
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:37
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.0	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.9	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.92	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41A-080819
Lab Sample ID: 240-117170-17
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:37
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41B-080819
Lab Sample ID: 240-117170-18
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:40
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	6.0	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.98	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41B-080819
Lab Sample ID: 240-117170-18
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:40
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41C-080819
Lab Sample ID: 240-117170-19
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:46
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.0	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.2	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.85	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41C-080819
Lab Sample ID: 240-117170-19
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:46
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	17	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41D-080819
Lab Sample ID: 240-117170-20
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:49
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	4.4	2.0	0.98	ug/L			1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	6.0	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW41D-080819
Lab Sample ID: 240-117170-20
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:49
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	17	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42A-080819
Lab Sample ID: 240-117170-21
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:43
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.3	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	1.2	2.0	0.98	ug/L	J		1	6020
7440-48-4	Cobalt	0.25	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.5	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	0.38	1.0	0.20	ug/L	J		1	6020
7440-62-2	Vanadium	1.2	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U	F1	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42A-080819
Lab Sample ID: 240-117170-21
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:43
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	99	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42B-080819
Lab Sample ID: 240-117170-22
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:47
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.65	2.0	0.57	ug/L	J		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	0.37	1.0	0.31	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.21	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.7	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.6	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	1.8	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	0.46	1.0	0.20	ug/L	J		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	2.1	10	1.8	ug/L	J		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42B-080819
Lab Sample ID: 240-117170-22
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:47
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42C-080819
Lab Sample ID: 240-117170-23
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:52
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.4	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.7	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.1	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.98	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L			1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42C-080819
Lab Sample ID: 240-117170-23
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:52
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42D-080819
Lab Sample ID: 240-117170-24
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:56
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.4	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.22	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	6.3	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.8	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.3	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42D-080819
Lab Sample ID: 240-117170-24
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:56
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43A-080819
Lab Sample ID: 240-117170-25
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:16
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43A-080819
Lab Sample ID: 240-117170-25
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:16
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43B-080819
Lab Sample ID: 240-117170-26
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:20
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.1	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.89	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43B-080819

Lab Sample ID: 240-117170-26

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 09:20

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	17	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	100	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43C-080819
Lab Sample ID: 240-117170-27
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:23
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.99	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43C-080819

Lab Sample ID: 240-117170-27

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 09:23

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43D-080819
Lab Sample ID: 240-117170-28
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:26
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.6	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.97	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW43D-080819
Lab Sample ID: 240-117170-28
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:26
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44A-080819
Lab Sample ID: 240-117170-29
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:56
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	1.9	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.0	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.6	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.89	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44A-080819
Lab Sample ID: 240-117170-29
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:56
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44B-080819
Lab Sample ID: 240-117170-30
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:01
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.9	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.8	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.90	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44B-080819
Lab Sample ID: 240-117170-30
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:01
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44C-080819
Lab Sample ID: 240-117170-31
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:05
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.2	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	6.1	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.97	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44C-080819
Lab Sample ID: 240-117170-31
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:05
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44D-080819
Lab Sample ID: 240-117170-32
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:09
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	11	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	5.3	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.5	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.89	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW44D-080819

Lab Sample ID: 240-117170-32

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 09:09

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45A-080819
Lab Sample ID: 240-117170-33
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:37
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.20	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.5	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.8	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45A-080819
Lab Sample ID: 240-117170-33
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:37
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	120	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45B-080819
Lab Sample ID: 240-117170-34
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:40
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.0	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	1.0	1.0	0.19	ug/L	U		1	6020
7440-50-8	Copper	4.8	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	1.7	2.0	1.5	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	0.96	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45B-080819
Lab Sample ID: 240-117170-34
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:40
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	18	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45C-080819
Lab Sample ID: 240-117170-35
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:47
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	13	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	1.1	2.0	0.98	ug/L	J		1	6020
7440-48-4	Cobalt	0.20	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.6	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	5.0	5.0	1.1	ug/L	U		1	6020
7440-02-0	Nickel	2.1	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.1	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45C-080819
Lab Sample ID: 240-117170-35
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:47
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	19	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	120	21		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45D-080819
Lab Sample ID: 240-117170-36
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:49
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.1	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	13	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.98	ug/L	U		1	6020
7440-48-4	Cobalt	0.22	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.9	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	0.45	1.0	0.45	ug/L	J		1	6020
7439-98-7	Molybdenum	1.4	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	2.6	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	1.0	1.0	0.20	ug/L	U		1	6020
7440-62-2	Vanadium	1.0	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW45D-080819
Lab Sample ID: 240-117170-36
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:49
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Hardness as calcium carbonate	130	33		mg/L			1	SM 2340B
	Calcium hardness as calcium carbonate	19	12		mg/L			1	SM 2340B
	Magnesium hardness as calcium carbonate	110	21		mg/L			1	SM 2340B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW37B-080819
Lab Sample ID: 240-117170-2
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 11:06
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.7	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW38B-080819
Lab Sample ID: 240-117170-6
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:05
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.6	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW39B-080819
Lab Sample ID: 240-117170-10
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:18
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.3	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW40B-080819
Lab Sample ID: 240-117170-14
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:26
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.6	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW41B-080819
Lab Sample ID: 240-117170-18
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:40
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.4	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW42B-080819
Lab Sample ID: 240-117170-22
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 10:47
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.5	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW43B-080819
Lab Sample ID: 240-117170-26
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:20
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.5	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW44B-080819
Lab Sample ID: 240-117170-30
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 09:01
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.5	1.0	0.14	mg/L			1	9060

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: MSA-SW45B-080819
Lab Sample ID: 240-117170-34
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2019 08:40
Reporting Basis: WET
Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Dissolved Organic Carbon	3.4	1.0	0.14	mg/L			1	9060

APPENDIX C

SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water

Report Number: 240-117170-1

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.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins 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 Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 8/9/2019 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.5º C, 3.1º C and 5.3º C.

The laboratory did not receive the DOC volume for sample EL-SW01B-080819. The client was contacted about the missing volume. The client informed the laboratory that the DOC was not collected for this sample.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-080819 (240-117170-1), MSA-SW37B-080819 (240-117170-2), MSA-SW37C-080819 (240-117170-3), MSA-SW37D-080819 (240-117170-4), MSA-SW38A-080819 (240-117170-5), MSA-SW38B-080819 (240-117170-6), MSA-SW38C080819 (240-117170-7), MSA-SW38D-080819 (240-117170-8), MSA-SW39A-080819 (240-117170-9), MSA-SW39B-080819 (240-117170-10), MSA-SW39C-080819 (240-117170-11), MSA-SW39D-080819 (240-117170-12), MSA-SW40A-080819 (240-117170-13), MSA-SW40B-080819 (240-117170-14), MSA-SW40C-080819 (240-117170-15), MSA-SW40D-080819 (240-117170-16), MSA-SW41A-080819 (240-117170-17), MSA-SW41B-080819 (240-117170-18), MSA-SW41C-080819 (240-117170-19), MSA-SW41D-080819 (240-117170-20), MSA-SW42A-080819 (240-117170-21), MSA-SW42B-080819 (240-117170-22), MSA-SW42C-080819 (240-117170-23), MSA-SW42D-080819 (240-117170-24), MSA-SW43A-080819 (240-117170-25), MSA-SW43B-080819 (240-117170-26), MSA-SW43C-080819 (240-117170-27), MSA-SW43D-080819 (240-117170-28), MSA-SW44A-080819 (240-117170-29), MSA-SW44B-080819 (240-117170-30), MSA-SW44C-080819 (240-117170-31), MSA-SW44D-080819 (240-117170-32), MSA-SW45A-080819 (240-117170-33), MSA-SW45B-080819 (240-117170-34), MSA-SW45C-080819 (240-117170-35), MSA-SW45D-080819 (240-117170-36), EL-SW01A-080819 (240-117170-37), EL-SW01B-080819 (240-117170-38), EL-SW01C-080819 (240-117170-39), EL-SW01D-080819 (240-117170-40), TB-080819 (240-117170-41), MSA-SW46A-080819 (240-117170-42), MSA-SW47A-080819 (240-117170-43), MSA-SW48A-080819 (240-117170-44) and MSA-SW49A-080819 (240-117170-45) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/12/2019, 08/13/2019, 08/14/2019 and 08/20/2019.

The following samples were received preserved with hydrochloric acid: MSA-SW37A-080819 (240-117170-1), MSA-SW37B-080819 (240-117170-2), MSA-SW37C-080819 (240-117170-3), MSA-SW37D-080819 (240-117170-4), MSA-SW38A-080819 (240-117170-5), MSA-SW38B-080819 (240-117170-6), MSA-SW38C080819 (240-117170-7), MSA-SW38D-080819 (240-117170-8), MSA-SW39A-080819 (240-117170-9), MSA-SW39B-080819 (240-117170-10), MSA-SW39C-080819 (240-117170-11), MSA-SW39D-080819 (240-117170-12), MSA-SW40A-080819 (240-117170-13), MSA-SW40B-080819 (240-117170-14), MSA-SW40C-080819 (240-117170-15), MSA-SW40D-080819 (240-117170-16), MSA-SW41A-080819 (240-117170-17), MSA-SW41B-080819 (240-117170-18), MSA-SW41C-080819 (240-117170-19), MSA-SW41D-080819 (240-117170-20), MSA-SW42A-080819 (240-117170-21), MSA-SW42B-080819 (240-117170-22), MSA-SW42C-080819 (240-117170-23), MSA-SW42D-080819 (240-117170-24), MSA-SW43A-080819 (240-117170-25), MSA-SW43B-080819 (240-117170-26),

MSA-SW43C-080819 (240-117170-27), MSA-SW43D-080819 (240-117170-28), MSA-SW44A-080819 (240-117170-29), MSA-SW44B-080819 (240-117170-30), MSA-SW44C-080819 (240-117170-31), MSA-SW44D-080819 (240-117170-32), MSA-SW45A-080819 (240-117170-33), MSA-SW45B-080819 (240-117170-34), MSA-SW45C-080819 (240-117170-35), MSA-SW45D-080819 (240-117170-36), EL-SW01A-080819 (240-117170-37), EL-SW01B-080819 (240-117170-38), EL-SW01C-080819 (240-117170-39), EL-SW01D-080819 (240-117170-40), TB-080819 (240-117170-41), MSA-SW46A-080819 (240-117170-42), MSA-SW47A-080819 (240-117170-43), MSA-SW48A-080819 (240-117170-44) and MSA-SW49A-080819 (240-117170-45). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-395620.

The continuing calibration verification (CCV) analyzed in batch 240-395620 was outside the method criteria for the following analytes: 1,1,2,2-tetrachloroethane and hexachlorobutadiene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 240-395857 was outside the method criteria for the following analyte(s): 1,2,3-trimethylbenzene, and dibromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-395857.

The continuing calibration verification (CCV) analyzed in batch 240-396858 was outside the method criteria for some analytes. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

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

DISSOLVED METALS (ICPMS)

Samples MSA-SW37A-080819 (240-117170-1), MSA-SW37B-080819 (240-117170-2), MSA-SW37C-080819 (240-117170-3), MSA-SW37D-080819 (240-117170-4), MSA-SW38A-080819 (240-117170-5), MSA-SW38B-080819 (240-117170-6), MSA-SW38C080819 (240-117170-7), MSA-SW38D-080819 (240-117170-8), MSA-SW39A-080819 (240-117170-9), MSA-SW39B-080819 (240-117170-10), MSA-SW39C-080819 (240-117170-11), MSA-SW39D-080819 (240-117170-12), MSA-SW40A-080819 (240-117170-13), MSA-SW40B-080819 (240-117170-14), MSA-SW40C-080819 (240-117170-15), MSA-SW40D-080819 (240-117170-16), MSA-SW41A-080819 (240-117170-17), MSA-SW41B-080819 (240-117170-18), MSA-SW41C-080819 (240-117170-19), MSA-SW41D-080819 (240-117170-20), MSA-SW42A-080819 (240-117170-21), MSA-SW42B-080819 (240-117170-22), MSA-SW42C-080819 (240-117170-23), MSA-SW42D-080819 (240-117170-24), MSA-SW43A-080819 (240-117170-25), MSA-SW43B-080819 (240-117170-26), MSA-SW43C-080819 (240-117170-27), MSA-SW43D-080819 (240-117170-28), MSA-SW44A-080819 (240-117170-29), MSA-SW44B-080819 (240-117170-30), MSA-SW44C-080819 (240-117170-31), MSA-SW44D-080819 (240-117170-32), MSA-SW45A-080819 (240-117170-33), MSA-SW45B-080819 (240-117170-34), MSA-SW45C-080819 (240-117170-35) and MSA-SW45D-080819 (240-117170-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/12/2019 and analyzed on 08/13/2019.

Silver was detected in method blank MB 240-395466/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Silver was detected in method blank MB 240-395472/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

DISSOLVED MERCURY (CVAA)

Samples MSA-SW37A-080819 (240-117170-1), MSA-SW37B-080819 (240-117170-2), MSA-SW37C-080819 (240-117170-3), MSA-SW37D-080819 (240-117170-4), MSA-SW38A-080819 (240-117170-5), MSA-SW38B-080819 (240-117170-6), MSA-SW38C080819 (240-117170-7), MSA-SW38D-080819 (240-117170-8), MSA-SW39A-080819 (240-117170-9), MSA-SW39B-080819 (240-117170-10), MSA-SW39C-080819 (240-117170-11), MSA-SW39D-080819 (240-117170-12), MSA-SW40A-080819 (240-117170-13), MSA-SW40B-080819 (240-117170-14), MSA-SW40C-080819 (240-117170-15), MSA-SW40D-080819 (240-117170-16), MSA-SW41A-080819 (240-117170-17), MSA-SW41B-080819 (240-117170-18), MSA-SW41C-080819 (240-117170-19), MSA-SW41D-080819 (240-117170-20), MSA-SW42A-080819 (240-117170-21), MSA-SW42B-080819 (240-117170-22), MSA-SW42C-080819 (240-117170-23), MSA-SW42D-080819 (240-117170-24), MSA-SW43A-080819 (240-117170-25), MSA-SW43B-080819 (240-117170-26), MSA-SW43C-080819 (240-117170-27), MSA-SW43D-080819 (240-117170-28), MSA-SW44A-080819 (240-117170-29), MSA-SW44B-080819 (240-117170-30), MSA-SW44C-080819 (240-117170-31), MSA-SW44D-080819 (240-117170-32), MSA-SW45A-080819 (240-117170-33), MSA-SW45B-080819 (240-117170-34), MSA-SW45C-080819 (240-117170-35) and MSA-SW45D-080819 (240-117170-36) were

analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/12/2019 and analyzed on 08/13/2019.

Mercury failed the recovery criteria high for the MS of sample MSA-SW42A-080819MS (240-117170-21) in batch 240-395947.

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

DISSOLVED ORGANIC CARBON

Samples MSA-SW37B-080819 (240-117170-2), MSA-SW38B-080819 (240-117170-6), MSA-SW39B-080819 (240-117170-10), MSA-SW40B-080819 (240-117170-14), MSA-SW41B-080819 (240-117170-18), MSA-SW42B-080819 (240-117170-22), MSA-SW43B-080819 (240-117170-26), MSA-SW44B-080819 (240-117170-30) and MSA-SW45B-080819 (240-117170-34) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 08/13/2019.

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

DISSOLVED HARDNESS (AS CACO3) BY CALCULATION

Samples MSA-SW37A-080819 (240-117170-1), MSA-SW37B-080819 (240-117170-2), MSA-SW37C-080819 (240-117170-3), MSA-SW37D-080819 (240-117170-4), MSA-SW38A-080819 (240-117170-5), MSA-SW38B-080819 (240-117170-6), MSA-SW38C080819 (240-117170-7), MSA-SW38D-080819 (240-117170-8), MSA-SW39A-080819 (240-117170-9), MSA-SW39B-080819 (240-117170-10), MSA-SW39C-080819 (240-117170-11), MSA-SW39D-080819 (240-117170-12), MSA-SW40A-080819 (240-117170-13), MSA-SW40B-080819 (240-117170-14), MSA-SW40C-080819 (240-117170-15), MSA-SW40D-080819 (240-117170-16), MSA-SW41A-080819 (240-117170-17), MSA-SW41B-080819 (240-117170-18), MSA-SW41C-080819 (240-117170-19), MSA-SW41D-080819 (240-117170-20), MSA-SW42A-080819 (240-117170-21), MSA-SW42B-080819 (240-117170-22), MSA-SW42C-080819 (240-117170-23), MSA-SW42D-080819 (240-117170-24), MSA-SW43A-080819 (240-117170-25), MSA-SW43B-080819 (240-117170-26), MSA-SW43C-080819 (240-117170-27), MSA-SW43D-080819 (240-117170-28), MSA-SW44A-080819 (240-117170-29), MSA-SW44B-080819 (240-117170-30), MSA-SW44C-080819 (240-117170-31), MSA-SW44D-080819 (240-117170-32), MSA-SW45A-080819 (240-117170-33), MSA-SW45B-080819 (240-117170-34), MSA-SW45C-080819 (240-117170-35) and MSA-SW45D-080819 (240-117170-36) were analyzed for dissolved hardness (as CaCO3) by calculation in accordance with SM 2340B. The samples were analyzed on 08/15/2019.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS VOA TICs

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

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

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-117170-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL CAN
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL CAN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN
7470A	Preparation, Mercury	SW846	TAL CAN

Protocol 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.

Laboratory References:

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-117170-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-117170-1	MSA-SW37A-080819	Water	08/08/19 11:02	08/09/19 10:45	
240-117170-2	MSA-SW37B-080819	Water	08/08/19 11:06	08/09/19 10:45	
240-117170-3	MSA-SW37C-080819	Water	08/08/19 11:11	08/09/19 10:45	
240-117170-4	MSA-SW37D-080819	Water	08/08/19 11:15	08/09/19 10:45	
240-117170-5	MSA-SW38A-080819	Water	08/08/19 10:01	08/09/19 10:45	
240-117170-6	MSA-SW38B-080819	Water	08/08/19 10:05	08/09/19 10:45	
240-117170-7	MSA-SW38C080819	Water	08/08/19 10:10	08/09/19 10:45	
240-117170-8	MSA-SW38D-080819	Water	08/08/19 10:15	08/09/19 10:45	
240-117170-9	MSA-SW39A-080819	Water	08/08/19 08:11	08/09/19 10:45	
240-117170-10	MSA-SW39B-080819	Water	08/08/19 08:18	08/09/19 10:45	
240-117170-11	MSA-SW39C-080819	Water	08/08/19 08:24	08/09/19 10:45	
240-117170-12	MSA-SW39D-080819	Water	08/08/19 08:31	08/09/19 10:45	
240-117170-13	MSA-SW40A-080819	Water	08/08/19 10:23	08/09/19 10:45	
240-117170-14	MSA-SW40B-080819	Water	08/08/19 10:26	08/09/19 10:45	
240-117170-15	MSA-SW40C-080819	Water	08/08/19 10:31	08/09/19 10:45	
240-117170-16	MSA-SW40D-080819	Water	08/08/19 10:35	08/09/19 10:45	
240-117170-17	MSA-SW41A-080819	Water	08/08/19 09:37	08/09/19 10:45	
240-117170-18	MSA-SW41B-080819	Water	08/08/19 09:40	08/09/19 10:45	
240-117170-19	MSA-SW41C-080819	Water	08/08/19 09:46	08/09/19 10:45	
240-117170-20	MSA-SW41D-080819	Water	08/08/19 09:49	08/09/19 10:45	
240-117170-21	MSA-SW42A-080819	Water	08/08/19 10:43	08/09/19 10:45	
240-117170-22	MSA-SW42B-080819	Water	08/08/19 10:47	08/09/19 10:45	
240-117170-23	MSA-SW42C-080819	Water	08/08/19 10:52	08/09/19 10:45	
240-117170-24	MSA-SW42D-080819	Water	08/08/19 10:56	08/09/19 10:45	
240-117170-25	MSA-SW43A-080819	Water	08/08/19 09:16	08/09/19 10:45	
240-117170-26	MSA-SW43B-080819	Water	08/08/19 09:20	08/09/19 10:45	
240-117170-27	MSA-SW43C-080819	Water	08/08/19 09:23	08/09/19 10:45	
240-117170-28	MSA-SW43D-080819	Water	08/08/19 09:26	08/09/19 10:45	
240-117170-29	MSA-SW44A-080819	Water	08/08/19 08:56	08/09/19 10:45	
240-117170-30	MSA-SW44B-080819	Water	08/08/19 09:01	08/09/19 10:45	
240-117170-31	MSA-SW44C-080819	Water	08/08/19 09:05	08/09/19 10:45	
240-117170-32	MSA-SW44D-080819	Water	08/08/19 09:09	08/09/19 10:45	
240-117170-33	MSA-SW45A-080819	Water	08/08/19 08:37	08/09/19 10:45	
240-117170-34	MSA-SW45B-080819	Water	08/08/19 08:40	08/09/19 10:45	
240-117170-35	MSA-SW45C-080819	Water	08/08/19 08:47	08/09/19 10:45	
240-117170-36	MSA-SW45D-080819	Water	08/08/19 08:49	08/09/19 10:45	
240-117170-37	EL-SW01A-080819	Water	08/08/19 07:54	08/09/19 10:45	
240-117170-38	EL-SW01B-080819	Water	08/08/19 07:59	08/09/19 10:45	
240-117170-39	EL-SW01C-080819	Water	08/08/19 08:01	08/09/19 10:45	
240-117170-40	EL-SW01D-080819	Water	08/08/19 08:04	08/09/19 10:45	
240-117170-41	TB-080819	Water	08/08/19 00:00	08/09/19 10:45	
240-117170-42	MSA-SW46A-080819	Water	08/08/19 10:39	08/09/19 10:45	
240-117170-43	MSA-SW47A-080819	Water	08/08/19 10:18	08/09/19 10:45	
240-117170-44	MSA-SW48A-080819	Water	08/08/19 09:56	08/09/19 10:45	
240-117170-45	MSA-SW49A-080819	Water	08/08/19 09:32	08/09/19 10:45	

Baltimore #201

3.0/3.1
2.4/2.5 5.2/5.3

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: John McFadden	Carrier: Fedex	1 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week Standard			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC08735	☐ 1 day			Sampler: S. Larson / W. Pryor

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Dissolved Metals (6020B/7470A)	Hardness SW846 SM	Dissolved organic carbon	Sample Specific Notes:
MSA-SW37A-080819	8/8/2019	1102	SW	Water	4	x	x	x	x		
MSA-SW37B-080819	8/8/2019	1106	SW	Water	6	x	x	x	x	x	
MSA-SW37C-080819	8/8/2019	1111	SW	Water	4	x	x	x	x		
MSA-SW37D-080819	8/8/2019	1115	SW	Water	4	x	x	x	x		
MSA-SW38A-080819	8/8/2019	1001	SW	Water	4	x	x	x	x		
MSA-SW38B-080819	8/8/2019	1005	SW	Water	6	x	x	x	x	x	
MSA-SW38C-080819	8/8/2019	1010	SW	Water	4	x	x	x	x		
MSA-SW38D-080819	8/8/2019	1015	SW	Water	4	x	x	x	x		
MSA-SW39A-080819	8/8/2019	0811	SW	Water	4	x	x	x	x		
MSA-SW39B-080819	8/8/2019	0818	SW	Water	6	x	x	x	x	x	
MSA-SW39C-080819	8/8/2019	0824	SW	Water	4	x	x	x	x		
MSA-SW39D-080819	8/8/2019	0831	SW	Water	4	x	x	x	x		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2	4	4	3	

240-117170 Chain of Custody

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *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 and DOC filtered in field

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/8/19	[signature]	ETA	8/8/19
[signature]	ETA	8/8/19 1700	[signature]	TA	8-9-19 1045

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

Baltimore
#201

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: John McFadden	Carrier: Fedex	2 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week Standard			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC08735	☐ 1 day			Sampler: S. Larson / W. Pryor

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Dissolved Metals (6020B/7470A)	Hardness SW846 SM	Dissolved organic carbon	Sample Specific Notes:
MSA-SW40A-080819	8/8/2019	1023	SW	Water	4	x	x	x	x		
MSA-SW40B-080819	8/8/2019	1026	SW	Water	6	x	x	x	x	x	
MSA-SW40C-080819	8/8/2019	1031	SW	Water	4	x	x	x	x		
MSA-SW40D-080819	8/8/2019	1035	SW	Water	4	x	x	x	x		
MSA-SW41A-080819	8/8/2019	0937	SW	Water	4	x	x	x	x		
MSA-SW41B-080819	8/8/2019	0940	SW	Water	6	x	x	x	x	x	
MSA-SW41C-080819	8/8/2019	0946	SW	Water	4	x	x	x	x		
MSA-SW41D-080819	8/8/2019	0949	SW	Water	4	x	x	x	x		
MSA-SW42A-080819	8/8/2019	1043	SW	Water	4	x	x	x	x		
MSA-SW42B-080819	8/8/2019	1047	SW	Water	6	x	x	x	x	x	
MSA-SW42C-080819	8/8/2019	1052	SW	Water	4	x	x	x	x		
MSA-SW42D-080819	8/8/2019	1056	SW	Water	4	x	x	x	x		
							2	4	4	3	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *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 and DOC filtered in field

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetratech	8/8/19	[signature]	ETA	8/8/19
[signature]	ETA 8/8/19	1700	[signature]	TA	8.9.19 1045

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Baltimore #201

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: John McFadden	Carrier: Fedex	3 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week Standard			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC08735	☐ 1 day			Sampler: S. Larson / W. Pryor

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Dissolved Metals (6020B/7470A)	Hardness SW846 SM	Dissolved organic carbon	Sample Specific Notes:
MSA-SW43A-080819	8/8/2019	0916	SW	Water	4	x	x	x	x		
MSA-SW43B-080819	8/8/2019	0920	SW	Water	6	x	x	x	x	x	
MSA-SW43C-080819	8/8/2019	0923	SW	Water	4	x	x	x	x		
MSA-SW43D-080819	8/8/2019	0926	SW	Water	4	x	x	x	x		
MSA-SW44A-080819	8/8/2019	0856	SW	Water	4	x	x	x	x		
MSA-SW44B-080819	8/8/2019	0901	SW	Water	6	x	x	x	x	x	
MSA-SW44C-080819	8/8/2019	0905	SW	Water	4	x	x	x	x		
MSA-SW44D-080819	8/8/2019	0909	SW	Water	4	x	x	x	x		
MSA-SW45A-080819	8/8/2019	0837	SW	Water	4	x	x	x	x		
MSA-SW45B-080819	8/8/2019	0840	SW	Water	6	x	x	x	x	x	
MSA-SW45C-080819	8/8/2019	0847	SW	Water	4	x	x	x	x		
MSA-SW45D-080819	8/8/2019	0849	SW	Water	4	x	x	x	x		
							2	4	4	3	

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 and DOC filtered in field

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/8/19	[signature]	ETA	8/8/19
[signature]	ETA 8/8/19	1700	[signature]	TA	8/9/19 1045

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

Baltimore #201

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: John McFadden	Carrier: Fedex	4 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week Standard			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC08735	☐ 1 day			Sampler: S. Larson / W. Pryor

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs (8260C)	Dissolved organic carbon	Sample Specific Notes:
EL-SW01A-080819	8/8/2019	0754	SW	AQ	3		x		
EL-SW01B-080819	8/8/2019	0759	SW	AQ	5		x	x	
EL-SW01C-080819	8/8/2019	0801	SW	AQ	3		x		
EL-SW01D-080819	8/8/2019	0804	SW	AQ	3		x		
TB-080819	--	--	TB	AQ	2		x		
MSA-SW46A-080819	8/8/2019	1039	SW	AQ	3		x		
MSA-SW47A-080819	8/8/2019	1018	SW	AQ	3		x		
MSA-SW48A-080819	8/8/2019	0956	SW	AQ	3		x		
MSA-SW49A-080819	8/8/2019	0932	SW	AQ	3		x		
							2	3	

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 and DOC filtered in field, samples on this page to be analyzed for VOCs ONLY

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/8/19	[signature]	ETA	8/8/19
[signature]	ETA 8/8/19	1700	[signature]	TA	8-9-19 1045

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 117170

Client Tetra Tech Site Name _____

Cooler Received on 8-9-19 Opened on 8-9-19

Cooler unpacked by: [signature]

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

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

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other MJH

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF +0.6°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____ Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC984738**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

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

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: MS

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login # : 117170

TestAmerica Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-8 #36	3.0	3.1	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36	2.4	2.5	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36	5.2	5.3	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-8 #36			Wet Ice Blue Ice Dry Ice Water None
				☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
MSA-SW37A-080819	240-117170-D-1	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW37B-080819	240-117170-G-2	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW37C-080819	240-117170-D-3	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW37D-080819	240-117170-D-4	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW38A-080819	240-117170-D-5	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW38B-080819	240-117170-F-6	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW38C080819	240-117170-D-7	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW38D-080819	240-117170-D-8	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW39A-080819	240-117170-D-9	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW39B-080819	240-117170-F-10	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW39C-080819	240-117170-E-11	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW39D-080819	240-117170-D-12	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW40A-080819	240-117170-D-13	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW40B-080819	240-117170-F-14	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW40C-080819	240-117170-D-15	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW40D-080819	240-117170-D-16	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW41A-080819	240-117170-D-17	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW41B-080819	240-117170-F-18	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW41C-080819	240-117170-D-19	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW41D-080819	240-117170-D-20	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW42A-080819	240-117170-D-21	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW42B-080819	240-117170-G-22	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW42C-080819	240-117170-D-23	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW42D-080819	240-117170-D-24	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW43A-080819	240-117170-D-25	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW43B-080819	240-117170-F-26	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW43C-080819	240-117170-D-27	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW43D-080819	240-117170-D-28	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW44A-080819	240-117170-D-29	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW44B-080819	240-117170-F-30	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW44C-080819	240-117170-D-31	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW44D-080819	240-117170-D-32	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW45A-080819	240-117170-D-33	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW45B-080819	240-117170-F-34	Plastic 500ml - with Nitric Acid	<2		
MSA-SW45C-080819	240-117170-D-35	Plastic 500ml - w/ Nitric - Dis.	<2		
MSA-SW45D-080819	240-117170-D-36	Plastic 500ml - w/ Nitric - Dis.	<2		

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

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-080819	240-117170-1	100	102	103	95
MSA-SW37B-080819	240-117170-2	102	103	103	96
MSA-SW37C-080819	240-117170-3	101	100	100	95
MSA-SW37D-080819	240-117170-4	102	102	104	96
MSA-SW38A-080819	240-117170-5	97	99	100	96
MSA-SW38B-080819	240-117170-6	103	104	102	95
MSA-SW38C080819	240-117170-7	101	101	99	92
MSA-SW38D-080819	240-117170-8	100	102	102	94
MSA-SW39A-080819	240-117170-9	100	104	104	96
MSA-SW39B-080819	240-117170-10	99	103	102	95
MSA-SW39C-080819	240-117170-11	103	104	102	97
MSA-SW39D-080819	240-117170-12	101	102	100	95
MSA-SW40A-080819	240-117170-13	100	104	100	95
MSA-SW40B-080819	240-117170-14	104	107	102	99
MSA-SW40C-080819	240-117170-15	101	104	99	92
MSA-SW40D-080819	240-117170-16	96	100	100	93
MSA-SW41A-080819	240-117170-17	101	102	101	91
MSA-SW41B-080819	240-117170-18	103	105	99	96
MSA-SW41C-080819	240-117170-19	103	104	102	92
MSA-SW41D-080819	240-117170-20	103	104	100	94
MSA-SW42A-080819	240-117170-21	102	103	101	94
MSA-SW42B-080819	240-117170-22	103	101	99	93
MSA-SW42C-080819	240-117170-23	97	101	100	94
MSA-SW42D-080819	240-117170-24	102	104	101	96
MSA-SW43A-080819	240-117170-25	102	103	99	91
MSA-SW43B-080819	240-117170-26	98	101	98	92
MSA-SW43C-080819	240-117170-27	100	104	101	93
MSA-SW43D-080819	240-117170-28	103	103	100	94
MSA-SW44A-080819	240-117170-29	98	102	99	92
MSA-SW44B-080819	240-117170-30	107	107	107	99
MSA-SW44C-080819	240-117170-31	104	103	99	94
MSA-SW44D-080819	240-117170-32	102	105	103	96
MSA-SW45A-080819	240-117170-33	102	103	101	94
MSA-SW45B-080819	240-117170-34	98	98	101	92
MSA-SW45C-080819	240-117170-35	102	103	100	92

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-128
DCA = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	70-123
BFB = 4-Bromofluorobenzene (Surr)	59-120

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

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-080819	240-117170-36	102	104	102	94
EL-SW01A-080819	240-117170-37	100	104	101	92
EL-SW01B-080819	240-117170-38	104	106	101	94
EL-SW01C-080819	240-117170-39	100	104	100	92
EL-SW01D-080819	240-117170-40	106	107	101	96
TB-080819	240-117170-41	100	105	90	88
MSA-SW46A-080819	240-117170-42	101	106	91	88
MSA-SW47A-080819	240-117170-43	96	104	89	91
MSA-SW48A-080819	240-117170-44	96	104	91	91
MSA-SW49A-080819	240-117170-45	95	100	90	88
	MB 240-395620/8	100	100	101	97
	MB 240-395857/8	101	102	100	95
	MB 240-396858/7	99	106	91	92
	LCS 240-395620/5	95	100	104	108
	LCS 240-395857/5	96	98	103	102
	LCS 240-396858/5	96	100	91	91

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-128
DCA = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	70-123
BFB = 4-Bromofluorobenzene (Surr)	59-120

Column to be used to flag recovery values

FORM II 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: U1909136.d Lab Sample ID: MB 240-395620/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/12/2019 19:44

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 240-395620/5	U1909133.d	08/12/2019 18:37
MSA-SW37A-080819	240-117170-1	U1909137.d	08/12/2019 20:07
MSA-SW37B-080819	240-117170-2	U1909138.d	08/12/2019 20:29
MSA-SW37C-080819	240-117170-3	U1909139.d	08/12/2019 20:51
MSA-SW37D-080819	240-117170-4	U1909140.d	08/12/2019 21:14
MSA-SW38A-080819	240-117170-5	U1909141.d	08/12/2019 21:36
MSA-SW38B-080819	240-117170-6	U1909142.d	08/12/2019 21:59
MSA-SW38C080819	240-117170-7	U1909143.d	08/12/2019 22:21
MSA-SW38D-080819	240-117170-8	U1909144.d	08/12/2019 22:44
MSA-SW39A-080819	240-117170-9	U1909145.d	08/12/2019 23:07
MSA-SW39B-080819	240-117170-10	U1909146.d	08/12/2019 23:29
MSA-SW39C-080819	240-117170-11	U1909147.d	08/12/2019 23:51
MSA-SW39D-080819	240-117170-12	U1909148.d	08/13/2019 00:14
MSA-SW40A-080819	240-117170-13	U1909149.d	08/13/2019 00:36
MSA-SW40B-080819	240-117170-14	U1909150.d	08/13/2019 00:58
MSA-SW40C-080819	240-117170-15	U1909151.d	08/13/2019 01:21
MSA-SW40D-080819	240-117170-16	U1909152.d	08/13/2019 01:43
MSA-SW41A-080819	240-117170-17	U1909153.d	08/13/2019 02:06
MSA-SW41B-080819	240-117170-18	U1909154.d	08/13/2019 02:28
MSA-SW41C-080819	240-117170-19	U1909155.d	08/13/2019 02:51
MSA-SW41D-080819	240-117170-20	U1909156.d	08/13/2019 03:13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-395620/8
Matrix: Water
Lab File ID: U1909136.d
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 19:44
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-395620/8
Matrix: Water
Lab File ID: U1909136.d
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 19:44
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-395620/8
Matrix: Water
Lab File ID: U1909136.d
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/12/2019 19:44
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395620
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	97		59-120
2037-26-5	Toluene-d8 (Surr)	101		70-123
1868-53-7	Dibromofluoromethane (Surr)	100		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-395620/8

Matrix: Water Lab File ID: U1909136.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/12/2019 19:44

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395620 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1909133.d

Lab ID: LCS 240-395620/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	19.8	99	80-124	
1,1,1-Trichloroethane	20.0	19.1	96	69-134	
1,1,2,2-Tetrachloroethane	20.0	23.9	120	65-139	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	20.0	100	50-156	
1,1-Dichloroethane	20.0	19.8	99	75-133	
1,1-Dichloroethene	20.0	20.3	101	65-139	
1,1-Dichloropropene	20.0	19.6	98	78-126	
1,2,3-Trichlorobenzene	20.0	20.0	100	39-138	
1,2,3-Trichloropropane	20.0	22.0	110	66-139	
1,2,4-Trichlorobenzene	20.0	18.8	94	42-133	
1,2,4-Trimethylbenzene	20.0	21.9	110	74-120	
1,2-Dibromo-3-Chloropropane	20.0	21.8	109	46-132	
1,2-Dichlorobenzene	20.0	21.5	108	78-120	
1,2-Dichloroethane	20.0	19.1	95	71-135	
1,2-Dichloropropane	20.0	19.8	99	78-133	
1,3-Dichlorobenzene	20.0	20.0	100	78-120	
1,3-Dichloropropane	20.0	21.0	105	72-134	
1,4-Dichlorobenzene	20.0	20.0	100	78-120	
2,2-Dichloropropane	20.0	20.4	102	42-150	
2-Chloroethyl vinyl ether	20.0	18.6	93	55-137	
2-Chlorotoluene	20.0	21.9	109	78-123	
2-Hexanone	40.0	40.7	102	43-148	
Bromobenzene	20.0	19.4	97	74-129	
Bromochloromethane	20.0	18.8	94	74-130	
4-Chlorotoluene	20.0	21.2	106	77-125	
p-Isopropyltoluene	20.0	20.8	104	69-122	
Acetone	40.0	52.2	131	21-162	
Benzene	20.0	20.1	101	80-123	
Bromoform	20.0	17.7	88	49-141	
Bromomethane	20.0	17.1	85	41-175	
Carbon disulfide	20.0	19.4	97	60-138	
Carbon tetrachloride	20.0	18.4	92	63-140	
Chlorobenzene	20.0	20.0	100	80-121	
Chloroethane	20.0	18.0	90	33-173	
Chloroform	20.0	19.8	99	79-127	
Chloromethane	20.0	15.1	75	54-143	
cis-1,2-Dichloroethene	20.0	19.4	97	76-128	
cis-1,3-Dichloropropene	20.0	18.8	94	64-132	
Hexachlorobutadiene	20.0	13.7	69	38-136	
Dibromomethane	20.0	16.1	81	74-124	
Bromodichloromethane	20.0	18.7	94	77-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1909133.d

Lab ID: LCS 240-395620/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	13.2	66	29-148	
Ethylbenzene	20.0	20.4	102	80-120	
1,2-Dibromoethane	20.0	19.3	97	77-123	
Naphthalene	20.0	23.4	117	28-141	
m-Xylene & p-Xylene	20.0	20.4	102	80-120	
n-Butylbenzene	20.0	21.2	106	57-126	
Isopropylbenzene	20.0	20.8	104	74-120	
n-Propylbenzene	20.0	21.1	106	77-123	
2-Butanone	40.0	42.4	106	39-163	
4-Methyl-2-pentanone	40.0	38.3	96	49-143	
sec-Butylbenzene	20.0	21.1	106	68-123	
Methyl tert-butyl ether	20.0	18.6	93	51-133	
Methylene Chloride	20.0	19.6	98	70-134	
o-Xylene	20.0	21.4	107	80-120	
Styrene	20.0	21.1	105	79-120	
tert-Butylbenzene	20.0	20.0	100	70-121	
Tetrachloroethene	20.0	17.6	88	74-130	
Toluene	20.0	20.9	104	78-129	
trans-1,2-Dichloroethene	20.0	19.8	99	78-133	
trans-1,3-Dichloropropene	20.0	18.0	90	55-128	
Trichloroethene	20.0	17.5	88	76-125	
Trichlorofluoromethane	20.0	16.7	83	51-164	
Vinyl acetate	20.0	20.1	100	45-151	
Vinyl chloride	20.0	16.4	82	58-143	
tert-Butyl alcohol	200	298	149	10-161	
Xylenes, Total	40.0	41.8	105	80-120	
Dibromochloromethane	20.0	19.4	97	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: U1909162.d Lab Sample ID: MB 240-395857/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/13/2019 19:30

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 240-395857/5	U1909159.d	08/13/2019 18:23
MSA-SW42A-080819	240-117170-21	U1909163.d	08/13/2019 19:53
MSA-SW42B-080819	240-117170-22	U1909164.d	08/13/2019 20:15
MSA-SW42C-080819	240-117170-23	U1909165.d	08/13/2019 20:38
MSA-SW42D-080819	240-117170-24	U1909166.d	08/13/2019 21:00
MSA-SW43A-080819	240-117170-25	U1909167.d	08/13/2019 21:23
MSA-SW43B-080819	240-117170-26	U1909168.d	08/13/2019 21:45
MSA-SW43C-080819	240-117170-27	U1909169.d	08/13/2019 22:08
MSA-SW43D-080819	240-117170-28	U1909170.d	08/13/2019 22:30
MSA-SW44A-080819	240-117170-29	U1909171.d	08/13/2019 22:52
MSA-SW44B-080819	240-117170-30	U1909172.d	08/13/2019 23:15
MSA-SW44C-080819	240-117170-31	U1909173.d	08/13/2019 23:37
MSA-SW44D-080819	240-117170-32	U1909174.d	08/14/2019 00:00
MSA-SW45A-080819	240-117170-33	U1909175.d	08/14/2019 00:22
MSA-SW45B-080819	240-117170-34	U1909176.d	08/14/2019 00:45
MSA-SW45C-080819	240-117170-35	U1909177.d	08/14/2019 01:07
MSA-SW45D-080819	240-117170-36	U1909178.d	08/14/2019 01:30
EL-SW01A-080819	240-117170-37	U1909179.d	08/14/2019 01:53
EL-SW01B-080819	240-117170-38	U1909180.d	08/14/2019 02:15
EL-SW01C-080819	240-117170-39	U1909181.d	08/14/2019 02:38
EL-SW01D-080819	240-117170-40	U1909182.d	08/14/2019 03:01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-395857/8
Matrix: Water
Lab File ID: U1909162.d
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 19:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-395857/8

Matrix: Water Lab File ID: U1909162.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 19:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-395857/8
Matrix: Water
Lab File ID: U1909162.d
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/13/2019 19:30
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 395857
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-121
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
2037-26-5	Toluene-d8 (Surr)	100		70-123
1868-53-7	Dibromofluoromethane (Surr)	101		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-395857/8

Matrix: Water Lab File ID: U1909162.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/13/2019 19:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 395857 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1909159.d

Lab ID: LCS 240-395857/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.1	101	80-124	
1,1,1-Trichloroethane	20.0	19.6	98	69-134	
1,1,2,2-Tetrachloroethane	20.0	24.8	124	65-139	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	20.5	103	50-156	
1,1-Dichloroethane	20.0	20.4	102	75-133	
1,1-Dichloroethene	20.0	20.4	102	65-139	
1,1-Dichloropropene	20.0	20.0	100	78-126	
1,2,3-Trichlorobenzene	20.0	18.1	90	39-138	
1,2,3-Trichloropropane	20.0	22.5	112	66-139	
1,2,4-Trichlorobenzene	20.0	17.1	85	42-133	
1,2,4-Trimethylbenzene	20.0	22.4	112	74-120	
1,2-Dibromo-3-Chloropropane	20.0	21.3	106	46-132	
1,2-Dichlorobenzene	20.0	21.6	108	78-120	
1,2-Dichloroethane	20.0	19.3	97	71-135	
1,2-Dichloropropane	20.0	20.5	103	78-133	
1,3-Dichlorobenzene	20.0	20.3	102	78-120	
1,3-Dichloropropane	20.0	21.1	105	72-134	
1,4-Dichlorobenzene	20.0	20.8	104	78-120	
2,2-Dichloropropane	20.0	20.4	102	42-150	
2-Chloroethyl vinyl ether	20.0	18.5	92	55-137	
2-Chlorotoluene	20.0	22.4	112	78-123	
2-Hexanone	40.0	40.7	102	43-148	
Bromobenzene	20.0	20.4	102	74-129	
Bromochloromethane	20.0	19.0	95	74-130	
4-Chlorotoluene	20.0	21.9	109	77-125	
p-Isopropyltoluene	20.0	21.3	107	69-122	
Acetone	40.0	45.9	115	21-162	
Benzene	20.0	20.8	104	80-123	
Bromoform	20.0	17.9	90	49-141	
Bromomethane	20.0	17.3	87	41-175	
Carbon disulfide	20.0	19.8	99	60-138	
Carbon tetrachloride	20.0	18.5	92	63-140	
Chlorobenzene	20.0	20.1	101	80-121	
Chloroethane	20.0	18.8	94	33-173	
Chloroform	20.0	20.4	102	79-127	
Chloromethane	20.0	15.5	78	54-143	
cis-1,2-Dichloroethene	20.0	19.9	100	76-128	
cis-1,3-Dichloropropene	20.0	18.7	94	64-132	
Hexachlorobutadiene	20.0	13.7	68	38-136	
Dibromomethane	20.0	16.8	84	74-124	
Bromodichloromethane	20.0	18.9	95	77-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1909159.d

Lab ID: LCS 240-395857/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	13.1	66	29-148	
Ethylbenzene	20.0	20.9	104	80-120	
1,2-Dibromoethane	20.0	20.1	100	77-123	
Naphthalene	20.0	21.7	108	28-141	
m-Xylene & p-Xylene	20.0	20.9	104	80-120	
n-Butylbenzene	20.0	21.5	107	57-126	
Isopropylbenzene	20.0	21.1	106	74-120	
n-Propylbenzene	20.0	22.0	110	77-123	
2-Butanone	40.0	42.0	105	39-163	
4-Methyl-2-pentanone	40.0	38.7	97	49-143	
sec-Butylbenzene	20.0	21.8	109	68-123	
Methyl tert-butyl ether	20.0	18.5	92	51-133	
Methylene Chloride	20.0	20.1	100	70-134	
o-Xylene	20.0	21.5	107	80-120	
Styrene	20.0	21.3	106	79-120	
tert-Butylbenzene	20.0	21.1	105	70-121	
Tetrachloroethene	20.0	18.7	93	74-130	
Toluene	20.0	21.4	107	78-129	
trans-1,2-Dichloroethene	20.0	20.2	101	78-133	
trans-1,3-Dichloropropene	20.0	18.1	90	55-128	
Trichloroethene	20.0	18.2	91	76-125	
Trichlorofluoromethane	20.0	17.5	87	51-164	
Vinyl acetate	20.0	20.1	101	45-151	
Vinyl chloride	20.0	16.6	83	58-143	
tert-Butyl alcohol	200	227	114	10-161	
Xylenes, Total	40.0	42.4	106	80-120	
Dibromochloromethane	20.0	19.5	97	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: U1272403.D Lab Sample ID: MB 240-396858/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX12 Date Analyzed: 08/20/2019 17:46

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 240-396858/5	U1272401.D	08/20/2019 17:01
TB-080819	240-117170-41	U1272409.D	08/20/2019 19:39
MSA-SW46A-080819	240-117170-42	U1272410.D	08/20/2019 20:01
MSA-SW47A-080819	240-117170-43	U1272411.D	08/20/2019 20:24
MSA-SW48A-080819	240-117170-44	U1272412.D	08/20/2019 20:47
MSA-SW49A-080819	240-117170-45	U1272413.D	08/20/2019 21:10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-396858/7
Matrix: Water
Lab File ID: U1272403.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 17:46
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-396858/7

Matrix: Water Lab File ID: U1272403.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 17:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	1.0	U	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-396858/7
Matrix: Water
Lab File ID: U1272403.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 17:46
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		70-121
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
2037-26-5	Toluene-d8 (Surr)	91		70-123
1868-53-7	Dibromofluoromethane (Surr)	99		75-128

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-396858/7

Matrix: Water Lab File ID: U1272403.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 17:46

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 396858 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I-TIC 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1272401.D

Lab ID: LCS 240-396858/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	18.2	91	80-124	
1,1,1-Trichloroethane	20.0	20.8	104	69-134	
1,1,2,2-Tetrachloroethane	20.0	19.7	98	65-139	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	21.1	106	50-156	
1,1-Dichloroethane	20.0	19.2	96	75-133	
1,1-Dichloroethene	20.0	21.4	107	65-139	
1,1-Dichloropropene	20.0	20.0	100	78-126	
1,2,3-Trichlorobenzene	20.0	12.9	65	39-138	
1,2,3-Trichloropropane	20.0	19.6	98	66-139	
1,2,4-Trichlorobenzene	20.0	13.1	66	42-133	
1,2,4-Trimethylbenzene	20.0	18.4	92	74-120	
1,2-Dibromo-3-Chloropropane	20.0	15.7	78	46-132	
1,2-Dichlorobenzene	20.0	17.3	87	78-120	
1,2-Dichloroethane	20.0	21.2	106	71-135	
1,2-Dichloropropane	20.0	21.0	105	78-133	
1,3-Dichlorobenzene	20.0	18.0	90	78-120	
1,3-Dichloropropane	20.0	19.8	99	72-134	
1,4-Dichlorobenzene	20.0	18.0	90	78-120	
2,2-Dichloropropane	20.0	17.4	87	42-150	
2-Chloroethyl vinyl ether	20.0	23.2	116	55-137	
2-Chlorotoluene	20.0	19.4	97	78-123	
2-Hexanone	40.0	39.5	99	43-148	
Bromobenzene	20.0	19.9	99	74-129	
Bromochloromethane	20.0	18.4	92	74-130	
4-Chlorotoluene	20.0	19.5	98	77-125	
p-Isopropyltoluene	20.0	18.3	91	69-122	
Acetone	40.0	31.1	78	21-162	
Benzene	20.0	19.6	98	80-123	
Bromoform	20.0	19.9	99	49-141	
Bromomethane	20.0	19.5	98	41-175	
Carbon disulfide	20.0	18.0	90	60-138	
Carbon tetrachloride	20.0	21.2	106	63-140	
Chlorobenzene	20.0	19.0	95	80-121	
Chloroethane	20.0	18.3	92	33-173	
Chloroform	20.0	20.1	100	79-127	
Chloromethane	20.0	10.8	54	54-143	
cis-1,2-Dichloroethene	20.0	19.0	95	76-128	
cis-1,3-Dichloropropene	20.0	21.9	110	64-132	
Hexachlorobutadiene	20.0	13.0	65	38-136	
Dibromomethane	20.0	19.8	99	74-124	
Bromodichloromethane	20.0	21.6	108	77-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U1272401.D

Lab ID: LCS 240-396858/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	13.5	68	29-148	
Ethylbenzene	20.0	19.1	96	80-120	
1,2-Dibromoethane	20.0	19.8	99	77-123	
Naphthalene	20.0	14.2	71	28-141	
m-Xylene & p-Xylene	20.0	19.3	97	80-120	
n-Butylbenzene	20.0	17.2	86	57-126	
Isopropylbenzene	20.0	18.4	92	74-120	
n-Propylbenzene	20.0	20.0	100	77-123	
2-Butanone	40.0	38.8	97	39-163	
4-Methyl-2-pentanone	40.0	39.8	100	49-143	
sec-Butylbenzene	20.0	18.5	93	68-123	
Methyl tert-butyl ether	20.0	19.7	99	51-133	
Methylene Chloride	20.0	17.2	86	70-134	
o-Xylene	20.0	18.4	92	80-120	
Styrene	20.0	19.0	95	79-120	
tert-Butylbenzene	20.0	19.2	96	70-121	
Tetrachloroethene	20.0	19.6	98	74-130	
Toluene	20.0	19.2	96	78-129	
trans-1,2-Dichloroethene	20.0	19.5	97	78-133	
trans-1,3-Dichloropropene	20.0	19.0	95	55-128	
Trichloroethene	20.0	20.5	103	76-125	
Trichlorofluoromethane	20.0	22.0	110	51-164	
Vinyl acetate	20.0	21.7	108	45-151	
Vinyl chloride	20.0	15.8	79	58-143	
tert-Butyl alcohol	200	113	56	10-161	
Xylenes, Total	40.0	37.7	94	80-120	
Dibromochloromethane	20.0	20.2	101	70-132	

Column to be used to flag recovery and RPD values

FORM III 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: BFB4108.D BFB Injection Date: 04/30/2019

Instrument ID: A3UX12 BFB Injection Time: 13:47

Analysis Batch No.: 378870

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	46.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	86.4	
175	5.0 - 9.0 % of mass 174	6.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	83.6	(96.8) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-378870/8	U1269795.D	04/30/2019	14:10
	STD8260 240-378870/9	U1269796.D	04/30/2019	14:33
	STD8260 240-378870/10	U1269797.D	04/30/2019	14:55
	ICIS 240-378870/11	U1269798.D	04/30/2019	15:17
	STD8260 240-378870/12	U1269799.D	04/30/2019	15:39
	STD8260 240-378870/13	U1269800.D	04/30/2019	16:02
	STD8260 240-378870/14	U1269801.D	04/30/2019	16:24
	ICV 240-378870/15	U1269802.D	04/30/2019	16:46
	STDA9 240-378870/18	U1269805.D	04/30/2019	17:52
	STDA9 240-378870/19	U1269806a.D	04/30/2019	18:14
	STDA9 240-378870/20	U1269807.D	04/30/2019	18:37
	STDA9 240-378870/21	U1269808.D	04/30/2019	18:59
	STDA9 240-378870/22	U1269809.D	04/30/2019	19:21
	STDA9 240-378870/23	U1269810.D	04/30/2019	19:43
	STDA9 240-378870/24	U1269811.D	04/30/2019	20:05
	ICV 240-378870/25	U1269812.D	04/30/2019	20:27

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-378870/14	U1269801.D
Level 2	STD8260 240-378870/13	U1269800.D
Level 3	STD8260 240-378870/12	U1269799.D
Level 4	ICIS 240-378870/11	U1269798.D
Level 5	STD8260 240-378870/10	U1269797.D
Level 6	STD8260 240-378870/9	U1269796.D
Level 7	STD8260 240-378870/8	U1269795.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3633 0.4173	0.3307 0.4106	0.3625	0.3979	0.4130	Ave		0.3850			0.1000	8.6		20.0			
Chloromethane	+++++ 0.3349	0.3157 0.3582	0.3458	0.3237	0.3462	Ave		0.3374			0.1000	4.7		20.0			
Butadiene	0.3642 0.3859	0.3535 0.3787	0.3596	0.3692	0.3849	Ave		0.3709				3.4		20.0			
Vinyl chloride	0.3531 0.3876	0.3746 0.3870	0.3765	0.3716	0.3891	Ave		0.3771			0.1000	3.4		20.0			
Bromomethane	0.2359 0.2352	0.2527 0.1909	0.2447	0.2332	0.2368	Ave		0.2328			0.0500	8.5		20.0			
Chloroethane	0.2531 0.2446	0.2455 0.2027	0.2395	0.2349	0.2376	Ave		0.2368			0.0500	6.8		20.0			
Dichlorofluoromethane	0.4736 0.4813	0.4798 0.4585	0.4834	0.4616	0.4743	Ave		0.4732				2.1		20.0			
Trichlorofluoromethane	0.4112 0.4427	0.3928 0.4146	0.4217	0.4207	0.4388	Ave		0.4204			0.1000	4.0		20.0			
Ethyl ether	0.2685 0.2474	0.2624 0.2312	0.2543	0.2471	0.2570	Ave		0.2526				4.8		20.0			
Acrolein	0.0778 0.0735	0.0754 +++++	0.0774	0.0729	0.0759	Ave		0.0755				2.7		20.0			
1,1-Dichloroethene	0.4303 0.4053	0.4157 0.4052	0.4117	0.4077	0.4183	Ave		0.4135			0.1000	2.2		20.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2628 0.2806	0.2614 0.2733	0.2761	0.2772	0.2842	Ave		0.2737			0.0500	3.2		20.0			
Acetone	+++++ 0.1421	0.2958 +++++	0.1578	0.1420	0.1462	Lin1	0.3105	0.1398			0.0100	2.7			1.0000		0.9900
Iodomethane	0.4620 0.4312	0.4507 0.4253	0.4283	0.4317	0.4473	Ave		0.4395				3.1		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	1.1582 0.8815	1.0493 0.8578	0.9096	0.8961	0.9091	Ave		0.9516			0.1000	11.6		20.0			
3-Chloro-1-propene	0.5306 0.4520	0.4842 0.4523	0.4599	0.4492	0.4714	Ave		0.4714				6.1		20.0			
Methyl acetate	0.3734 0.3369	0.3585 +++++	0.3445	0.3309	0.3439	Ave		0.3480			0.1000	4.4		20.0			
Methylene Chloride	+++++ 0.3493	1.2721 0.3463	0.4243	0.3723	0.3728	Lin1	0.9295	0.3363			0.1000	2.8			1.0000		0.9900
tert-Butyl alcohol	0.0805 0.0680	0.0761 +++++	0.0730	0.0700	0.0718	Ave		0.0732				6.1		20.0			
Acrylonitrile	0.1960 0.1727	0.1891 +++++	0.1798	0.1713	0.1778	Ave		0.1811				5.3		20.0			
trans-1,2-Dichloroethene	0.4388 0.3861	0.4327 0.3845	0.4006	0.3951	0.4062	Ave		0.4063			0.1000	5.3		20.0			
Methyl tert-butyl ether	0.8683 0.8061	0.8857 0.7696	0.8607	0.8334	0.8545	Ave		0.8398			0.1000	4.8		20.0			
Hexane	0.4565 0.4534	0.4143 0.4249	0.4503	0.4473	0.4579	Ave		0.4435				3.8		20.0			
1,1-Dichloroethane	0.5177 0.4943	0.5212 0.4907	0.5091	0.4989	0.5149	Ave		0.5067			0.2000	2.4		20.0			
Vinyl acetate	0.5580 0.5787	0.5728 +++++	0.5589	0.5619	0.5864	Ave		0.5694				2.1		20.0			
2,2-Dichloropropane	0.3469 0.3079	0.3283 0.3227	0.3273	0.3311	0.3375	Ave		0.3288				3.7		20.0			
cis-1,2-Dichloroethene	0.3560 0.3343	0.3649 0.3316	0.3413	0.3352	0.3475	Ave		0.3444			0.1000	3.6		20.0			
2-Butanone	0.0615 0.0642	0.0597 +++++	0.0632	0.0607	0.0645	Ave		0.0623			0.0100	3.2		20.0			
Bromochloromethane	0.2785 0.2285	0.2509 0.2244	0.2357	0.2316	0.2400	Ave		0.2413				7.7		20.0			
Tetrahydrofuran	0.1604 0.1508	0.1429 +++++	0.1501	0.1446	0.1514	Ave		0.1500				4.1		20.0			
Chloroform	0.5004 0.4703	0.4870 0.4731	0.4836	0.4829	0.4938	Ave		0.4844			0.2000	2.2		20.0			
1,1,1-Trichloroethane	0.3922 0.4192	0.4015 0.4179	0.4170	0.4276	0.4345	Ave		0.4157			0.1000	3.5		20.0			
Cyclohexane	0.5033 0.5135	0.4858 0.4766	0.5239	0.5157	0.5153	Ave		0.5049			0.1000	3.5		20.0			
1,1-Dichloropropene	0.4381 0.4050	0.4072 0.3945	0.4119	0.4049	0.4145	Ave		0.4109				3.3		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.3547 0.3535	0.3314 0.3513	0.3425	0.3636	0.3768	Ave		0.3534			0.1000	4.1		20.0			
Isobutyl alcohol	0.0214 0.0190	0.0189 +++++	0.0202	0.0197	0.0201	Ave		0.0199				4.6		20.0			
Benzene	1.2351 1.1561	1.2006 1.1376	1.1748	1.1526	1.1878	Ave		1.1778			0.5000	2.8		20.0			
1,2-Dichloroethane	0.3915 0.3540	0.3893 0.3393	0.3455	0.3539	0.3641	Ave		0.3625			0.1000	5.7		20.0			
n-Heptane	+++++ 0.2241	0.8189 0.2083	0.2765	0.2406	0.2291	Lin1	0.6210	0.2083				3.9			0.9990		0.9900
Trichloroethene	0.3459 0.3108	0.3166 0.3021	0.3026	0.3105	0.3179	Ave		0.3152			0.1500	4.7		20.0			
Methylcyclohexane	0.5757 0.5798	0.5136 0.5210	0.5842	0.5782	0.5985	Ave		0.5644			0.1000	5.9		20.0			
1,2-Dichloropropane	0.2504 0.2495	0.2406 0.2466	0.2499	0.2468	0.2580	Ave		0.2488			0.1000	2.1		20.0			
Dibromomethane	0.2511 0.2018	0.2266 0.1879	0.1970	0.2002	0.2123	Ave		0.2110				10.2		20.0			
1,4-Dioxane	0.0035 0.0040	0.0034 0.0038	0.0047	0.0044	0.0043	Ave		0.0040				12.1		20.0			
Bromodichloromethane	0.3369 0.3474	0.3224 0.3346	0.3359	0.3412	0.3584	Ave		0.3396			0.1500	3.3		20.0			
2-Chloroethyl vinyl ether	0.1875 0.1911	0.1776 0.1507	0.1862	0.1818	0.1895	Ave		0.1806				7.7		20.0			
cis-1,3-Dichloropropene	0.4366 0.4171	0.4107 0.3952	0.4011	0.4068	0.4265	Ave		0.4134			0.1500	3.5		20.0			
4-Methyl-2-pentanone	0.3839 0.3806	0.3808 +++++	0.3872	0.3769	0.3911	Ave		0.3834			0.0500	1.3		20.0			
Toluene	1.8023 1.6267	1.6891 1.6145	1.6659	1.6181	1.7001	Ave		1.6738			0.4000	4.0		20.0			
trans-1,3-Dichloropropene	0.5769 0.5343	0.5645 0.5065	0.5263	0.5262	0.5576	Ave		0.5418			0.1000	4.6		20.0			
Ethyl methacrylate	0.5226 0.5394	0.4946 0.4478	0.5518	0.5362	0.5613	Ave		0.5220				7.5		20.0			
1,1,2-Trichloroethane	0.3778 0.3286	0.3178 0.3033	0.3333	0.3248	0.3429	Ave		0.3327			0.1000	7.1		20.0			
Tetrachloroethene	0.4570 0.4417	0.4243 0.4396	0.4476	0.4415	0.4623	Ave		0.4449			0.1500	2.8		20.0			
1,3-Dichloropropane	0.6595 0.5804	0.5855 0.5367	0.5879	0.5738	0.6044	Ave		0.5898				6.3		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.4148 0.3823	0.3921 +++++	0.4171	0.3943	0.3992	Ave		0.4000			0.0500	3.4		20.0			
Dibromochloromethane	0.3436 0.3509	0.3261 0.3352	0.3393	0.3492	0.3738	Ave		0.3454				4.4		20.0			
1,2-Dibromoethane	0.3803 0.3593	0.3661 0.3178	0.3511	0.3562	0.3736	Ave		0.3578				5.7		20.0			
Chlorobenzene	1.1917 1.0431	1.0788 1.0358	1.0620	1.0437	1.1063	Ave		1.0802			0.3000	5.1		20.0			
1,1,1,2-Tetrachloroethane	0.3770 0.3768	0.3617 0.3870	0.3721	0.3706	0.3978	Ave		0.3776				3.1		20.0			
Ethylbenzene	0.6003 0.5897	0.5954 0.5969	0.6098	0.5997	0.6287	Ave		0.6029				2.1		20.0			
m-Xylene & p-Xylene	0.7152 0.7393	0.7520 0.7353	0.7549	0.7557	0.7836	Ave		0.7480				2.8		20.0			
o-Xylene	0.7592 0.7370	0.7654 0.7387	0.7487	0.7584	0.7848	Ave		0.7560				2.2		20.0			
Styrene	1.2553 1.2064	1.1402 1.1932	1.2030	1.2192	1.2715	Ave		1.2127			0.3000	3.5		20.0			
Bromoform	0.2213 0.2662	0.2350 0.2312	0.2485	0.2670	0.2802	Ave		0.2499			0.1000	8.7		20.0			
Isopropylbenzene	1.9470 1.9256	1.9183 1.9274	2.0090	1.9856	2.0675	Ave		1.9686			0.1000	2.8		20.0			
1,1,2,2-Tetrachloroethane	0.9347 1.0089	0.9925 0.8398	1.0421	1.0190	1.0529	Ave		0.9843			0.3000	7.6		20.0			
Bromobenzene	0.9090 0.8447	0.8758 0.8518	0.8455	0.8624	0.8771	Ave		0.8666				2.6		20.0			
1,2,3-Trichloropropane	0.3616 0.3604	0.3856 +++++	0.3726	0.3724	0.3827	Ave		0.3726				2.8		20.0			
trans-1,4-Dichloro-2-butene	0.3307 0.3153	0.3082 +++++	0.3131	0.3186	0.3275	Ave		0.3189				2.7		20.0			
n-Propylbenzene	0.9647 0.9889	0.9069 0.9978	0.9987	1.0115	1.0363	Ave		0.9864				4.2		20.0			
2-Chlorotoluene	0.8029 0.8162	0.7917 0.8480	0.8225	0.8298	0.8726	Ave		0.8263				3.3		20.0			
1,3,5-Trimethylbenzene	2.7098 2.8199	2.6571 2.8891	2.8991	2.9082	3.0109	Ave		2.8420				4.3		20.0			
4-Chlorotoluene	0.8644 0.8286	0.8857 0.8408	0.8361	0.8393	0.8746	Ave		0.8528				2.6		20.0			
tert-Butylbenzene	2.4839 2.5923	2.3390 2.6462	2.6216	2.6249	2.7660	Ave		2.5820				5.2		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.9044 2.8957	2.7731 2.9649	2.9896	2.9855	3.0915	Ave		2.9435				3.4		20.0			
sec-Butylbenzene	3.4931 3.7070	3.4481 3.7162	3.8562	3.8180	3.9769	Ave		3.7165				5.1		20.0			
1,3-Dichlorobenzene	1.8530 1.6328	1.7598 1.6496	1.6537	1.6730	1.7292	Ave		1.7073			0.6000	4.6		20.0			
p-Isopropyltoluene	2.9898 3.1812	3.0425 3.2731	3.2720	3.2957	3.4448	Ave		3.2142				4.9		20.0			
1,4-Dichlorobenzene	1.9866 1.6505	1.8499 1.6771	1.6636	1.7046	1.7595	Ave		1.7560			0.5000	7.0		20.0			
n-Butylbenzene	2.5658 2.7237	2.6277 2.8018	2.7646	2.7987	2.9054	Ave		2.7411				4.2		20.0			
1,2-Dichlorobenzene	1.8655 1.5698	1.6719 1.6169	1.5834	1.6103	1.6665	Ave		1.6549			0.4000	6.1		20.0			
1,2-Dibromo-3-Chloropropane	0.3275 0.3332	0.2864 +++++	0.3130	0.3187	0.3491	Ave		0.3213			0.0500	6.6		20.0			
1,2,4-Trichlorobenzene	1.2956 1.0915	1.2328 1.2075	1.0259	1.0636	1.1751	Ave		1.1560			0.2000	8.5		20.0			
Hexachlorobutadiene	0.5365 0.4716	0.6238 0.5042	0.4510	0.4832	0.5034	Ave		0.5105				11.1		20.0			
Naphthalene	3.8848 3.4986	3.9098 3.2717	3.4440	3.5237	3.8266	Ave		3.6227				6.9		20.0			
1,2,3-Trichlorobenzene	1.2332 0.9963	1.1549 1.1194	0.9312	0.9820	1.0736	Ave		1.0701				10.0		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2632	0.2807 0.2572	0.2551	0.2667	0.2730	Ave		0.2660				3.6		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2956	0.3370 0.2788	0.2849	0.2939	0.3026	Ave		0.2988				6.9		20.0			
Toluene-d8 (Surr)	+++++ 1.3548	1.6210 1.3318	1.3946	1.3817	1.4168	Ave		1.4168				7.4		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4999	0.6202 0.4892	0.5085	0.4983	0.5153	Ave		0.5219				9.4		20.0			

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-378870/14	U1269801.D
Level 2	STD8260 240-378870/13	U1269800.D
Level 3	STD8260 240-378870/12	U1269799.D
Level 4	ICIS 240-378870/11	U1269798.D
Level 5	STD8260 240-378870/10	U1269797.D
Level 6	STD8260 240-378870/9	U1269796.D
Level 7	STD8260 240-378870/8	U1269795.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	11044 1567191	19984 2052069	224597	496091	1030351	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chloromethane	FB	Ave	+++++ 1257715	19082 1789816	214265	403612	863765	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
Butadiene	FB	Ave	11073 1449292	21365 1892418	222795	460371	960327	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Vinyl chloride	FB	Ave	10733 1455844	22643 1934142	233314	463335	970649	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromomethane	FB	Ave	7170 883232	15275 953805	151619	290732	590824	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chloroethane	FB	Ave	7695 918797	14836 1012997	148379	292854	592754	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	14396 1807740	29001 2290963	299518	575498	1183160	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	12502 1662729	23742 2071934	261265	524611	1094737	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl ether	FB	Ave	8163 929149	15857 1155554	157567	308106	641131	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Acrolein	FB	Ave	11833 1380457	22786 +++++	239777	454386	946268	2.50 300	5.00 +++++	50.0	100	200
1,1-Dichloroethene	FB	Ave	13081 1522285	25123 2024854	255094	508373	1043595	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	7988 1054000	15799 1365935	171045	345600	708990	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Acetone	FB	Lin1	+++++ 1067191	35750 +++++	195589	354093	729471	+++++ 120	2.00 +++++	20.0	40.0	80.0
Iodomethane	FB	Ave	14045 1619670	27241 2125484	265387	538227	1115860	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Carbon disulfide	FB	Ave	35208 3310792	63418 4286373	563594	1117299	2267883	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	16129 1697487	29262 2260088	284969	560067	1176034	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl acetate	FB	Ave	22700 2530486	43336 +++++	426943	825132	1715851	1.00 120	2.00 +++++	20.0	40.0	80.0
Methylene Chloride	FB	Lin1	+++++ 1311846	76885 1730659	262888	464186	930086	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
tert-Butyl alcohol	FB	Ave	24459 2552659	46009 +++++	452013	872907	1790088	5.00 600	10.0 +++++	100	200	400
Acrylonitrile	FB	Ave	59579 6486159	114297 +++++	1113771	2135420	4436089	5.00 600	10.0 +++++	100	200	400
trans-1,2-Dichloroethene	FB	Ave	13341 1450217	26151 1921542	248232	492658	1013326	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	26396 3027404	53530 3846016	533312	1039087	2131851	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Hexane	FB	Ave	13878 1702774	25038 2123105	279012	557732	1142313	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	15738 1856520	31501 2451944	315456	622049	1284657	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Vinyl acetate	FB	Ave	16963 2173371	34619 +++++	346293	700651	1462850	0.500 60.0	1.00 +++++	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	10546 1156337	19842 1612711	202782	412857	841953	0.500 60.0	1.00 80.0	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	10822 1255612	22054 1657053	211496	417933	866934	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Butanone	FB	Ave	3739 482200	7212 +++++	78345	151425	322049	1.00 120	2.00 +++++	20.0	40.0	80.0
Bromochloromethane	FB	Ave	8465 858112	15161 1121143	146065	288735	598675	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	9753 1132369	17279 +++++	185955	360495	755334	1.00 120	2.00 +++++	20.0	40.0	80.0
Chloroform	FB	Ave	15213 1766502	29434 2363996	299618	602114	1231881	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	11924 1574408	24264 2088351	258363	533200	1083939	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Cyclohexane	FB	Ave	15299 1928649	29359 2381579	324586	642956	1285622	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	13318 1521069	24613 1971517	255221	504905	1034085	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	10783 1327796	20029 1755611	212237	453383	940122	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	16262 1784970	28500 +++++	312412	615511	1254651	12.5 1500	25.0 +++++	250	500	1000

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	37546 4341955	72564 5684570	727951	1437120	2963156	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloroethane	FB	Ave	11902 1329568	23529 1695389	214099	441298	908435	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 841832	49490 1041160	171315	299975	571599	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
Trichloroethene	FB	Ave	10516 1167306	19135 1509661	187506	387176	793097	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	17502 2177617	31043 2603437	361953	720921	1493017	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	7613 937223	14544 1232396	154817	307704	643520	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dibromomethane	FB	Ave	7633 757811	13696 938835	122075	249664	529643	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	2151 298901	4063 374894	58179	110260	212766	10.0 1200	20.0 1600	200	400	800
Bromodichloromethane	FB	Ave	10242 1304681	19488 1672281	208118	425494	894000	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	11398 1435551	21468 1506274	230721	453314	945507	1.00 120	2.00 160	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	13273 1566673	24819 1974815	248543	507172	1063891	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Methyl-2-pentanone	FB	Ave	23343 2858560	46025 +++++	479830	939875	1951525	1.00 120	2.00 +++++	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	36733 4263658	69512 5446274	693965	1384009	2883485	0.500 60.0	1.00 80.0	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	11758 1400355	23230 1708636	219235	450107	945703	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	10652 1413898	20354 1510478	229870	458650	952052	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	7700 861361	13079 1023274	138863	277803	581540	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	9314 1157587	17463 1482922	186459	377626	784044	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	13441 1521180	24096 1810575	244890	490824	1025142	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	16906 2004012	32274 +++++	347483	674546	1354308	1.00 120	2.00 +++++	20.0	40.0	80.0
Dibromochloromethane	CBNZ d5	Ave	7003 919717	13420 1130859	141322	298689	633936	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dibromoethane	CBNZ d5	Ave	7750 941630	15068 1071876	146267	304693	633639	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	24288 2734043	44396 3494036	442384	892667	1876430	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	7683 987481	14884 1305612	154999	316979	674622	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	12234 1545630	24504 2013623	254036	512928	1066262	0.500 60.0	1.00 80.0	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	14577 1937780	30946 2480479	314453	646378	1329053	0.500 60.0	1.00 80.0	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	15474 1931683	31499 2491810	311889	648657	1331003	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	25585 3161922	46924 4024869	501125	1042824	2156541	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	4510 697809	9669 780055	103500	228364	475190	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	39682 5047046	78943 6501576	836910	1698359	3506656	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	10861 1444688	23506 1530842	237420	473524	982071	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	10562 1209647	20743 1552619	192642	400745	818090	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	4202 516092	9133 +++++	84888	173052	356976	0.500 60.0	1.00 +++++	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3843 451551	7300 +++++	71337	148061	305416	0.500 60.0	1.00 +++++	10.0	20.0	40.0
n-Propylbenzene	DCBd 4	Ave	11209 1416141	21478 1818752	227545	470058	966595	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	9330 1168744	18750 1545785	187392	385627	813877	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	31487 4038075	62930 5266204	660502	1351432	2808258	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	10044 1186575	20976 1532612	190484	390042	815761	0.500 60.0	1.00 80.0	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	28862 3712091	55395 4823562	597272	1219799	2579873	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	33748 4146548	65676 5404391	681127	1387358	2883392	0.500 60.0	1.00 80.0	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	40589 5308368	81663 6773871	878572	1774243	3709245	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	21531 2338079	41679 3006850	376754	777449	1612862	0.500 60.0	1.00 80.0	10.0	20.0	40.0
p-Isopropyltoluene	DCBd 4	Ave	34741 4555449	72056 5966210	745472	1531521	3212945	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	23084 2363448	43811 3056952	379011	792152	1641044	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Butylbenzene	DCBd 4	Ave	29814 3900305	62232 5107201	629870	1300578	2709817	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	21676 2247875	39597 2947208	360738	748334	1554362	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	3806 477069	6783 +++++	71305	148124	325575	0.500 60.0	1.00 +++++	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	15055 1562937	29197 2200965	233740	494279	1096024	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	6234 675267	14773 918998	102755	224541	469488	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	45140 5009873	92597 5963618	784648	1637491	3569051	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	14329 1426661	27351 2040460	212164	456339	1001370	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 988457	16968 1285236	158064	332600	680998	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 1110364	20365 1393127	176503	366398	754824	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 3550979	66709 4492583	580962	1181805	2403057	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 1310206	25525 1650135	211821	426237	874019	+++++ 60.0	1.00 80.0	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-378870/14	U1269801.D
Level 2	STD8260 240-378870/13	U1269800.D
Level 3	STD8260 240-378870/12	U1269799.D
Level 4	ICIS 240-378870/11	U1269798.D
Level 5	STD8260 240-378870/10	U1269797.D
Level 6	STD8260 240-378870/9	U1269796.D
Level 7	STD8260 240-378870/8	U1269795.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Acetone	+++++ +++++	0.5						50				
Methylene Chloride	+++++	1.9						50				
n-Heptane	+++++	-5.0						50				

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-378870/15 Calibration Date: 04/30/2019 16:46

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1269802.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	0.3850	0.3222	0.1000	0.0167	0.0200	-16.3	30.0
Chloromethane	Ave	0.3374	0.3285	0.1000	0.0195	0.0200	-2.6	30.0
Butadiene	Ave	0.3709	0.3353		0.0181	0.0200	-9.6	30.0
Vinyl chloride	Ave	0.3771	0.3787	0.1000	0.0201	0.0200	0.4	30.0
Bromomethane	Ave	0.2328	0.2224	0.0500	0.0191	0.0200	-4.4	30.0
Chloroethane	Ave	0.2368	0.2302	0.0500	0.0194	0.0200	-2.8	30.0
Dichlorofluoromethane	Ave	0.4732	0.4997		0.0211	0.0200	5.6	30.0
Trichlorofluoromethane	Ave	0.4204	0.4076	0.1000	0.0194	0.0200	-3.0	30.0
Ethyl ether	Ave	0.2526	0.2615		0.0207	0.0200	3.5	30.0
Acrolein	Ave	0.0755	0.0650		0.0861	0.100	-13.9	30.0
1,1-Dichloroethene	Ave	0.4135	0.4227	0.1000	0.0204	0.0200	2.2	30.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2737	0.2804	0.0500	0.0205	0.0200	2.5	30.0
Acetone	Lin1		0.1555	0.0100	0.0423	0.0400	5.7	50.0
Iodomethane	Ave	0.4395	0.4317		0.0196	0.0200	-1.8	30.0
Carbon disulfide	Ave	0.9516	0.8606	0.1000	0.0181	0.0200	-9.6	30.0
3-Chloro-1-propene	Ave	0.4714	0.4556		0.0193	0.0200	-3.3	30.0
Methyl acetate	Ave	0.3480	0.3354	0.1000	0.0385	0.0400	-3.6	50.0
Methylene Chloride	Lin1		0.3744	0.1000	0.0195	0.0200	-2.5	50.0
tert-Butyl alcohol	Ave	0.0732	0.0784		0.214	0.200	7.1	30.0
Acrylonitrile	Ave	0.1811	0.1775		0.196	0.200	-2.0	30.0
trans-1,2-Dichloroethene	Ave	0.4063	0.4067	0.1000	0.0200	0.0200	0.0	30.0
Methyl tert-butyl ether	Ave	0.8398	0.8451	0.1000	0.0201	0.0200	0.6	30.0
Hexane	Ave	0.4435	0.4479		0.0202	0.0200	1.0	30.0
1,1-Dichloroethane	Ave	0.5067	0.5009	0.2000	0.0198	0.0200	-1.1	30.0
Vinyl acetate	Ave	0.5694	0.6286		0.0221	0.0200	10.4	30.0
2,2-Dichloropropane	Ave	0.3288	0.3089		0.0188	0.0200	-6.1	30.0
cis-1,2-Dichloroethene	Ave	0.3444	0.3344	0.1000	0.0194	0.0200	-2.9	30.0
2-Butanone	Ave	0.0623	0.0642	0.0100	0.0412	0.0400	3.1	50.0
Bromochloromethane	Ave	0.2413	0.2321		0.0192	0.0200	-3.8	30.0
Tetrahydrofuran	Ave	0.1500	0.1525		0.0407	0.0400	1.6	30.0
Chloroform	Ave	0.4844	0.4803	0.2000	0.0198	0.0200	-0.8	30.0
1,1,1-Trichloroethane	Ave	0.4157	0.4258	0.1000	0.0205	0.0200	2.4	30.0
Cyclohexane	Ave	0.5049	0.5068	0.1000	0.0201	0.0200	0.4	30.0
1,1-Dichloropropene	Ave	0.4109	0.4100		0.0200	0.0200	-0.2	30.0
Carbon tetrachloride	Ave	0.3534	0.3567	0.1000	0.0202	0.0200	0.9	30.0
Isobutyl alcohol	Ave	0.0199	0.0212		0.534	0.500	6.8	30.0
Benzene	Ave	1.178	1.160	0.5000	0.0197	0.0200	-1.5	30.0
1,2-Dichloroethane	Ave	0.3625	0.3568	0.1000	0.0197	0.0200	-1.6	30.0
n-Heptane	Lin1		0.2434		0.0204	0.0200	1.9	30.0
Trichloroethene	Ave	0.3152	0.3133	0.1500	0.0199	0.0200	-0.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-378870/15 Calibration Date: 04/30/2019 16:46

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1269802.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5644	0.5547	0.1000	0.0197	0.0200	-1.7	30.0
1,2-Dichloropropane	Ave	0.2488	0.2556	0.1000	0.0205	0.0200	2.7	30.0
Dibromomethane	Ave	0.2110	0.1998		0.0189	0.0200	-5.3	30.0
1,4-Dioxane	Ave	0.0040	0.0050		0.498	0.400	24.5	50.0
Bromodichloromethane	Ave	0.3396	0.3391	0.1500	0.0200	0.0200	-0.1	30.0
2-Chloroethyl vinyl ether	Ave	0.1806	0.1852		0.0205	0.0200	2.5	30.0
cis-1,3-Dichloropropene	Ave	0.4134	0.4266	0.1500	0.0206	0.0200	3.2	50.0
4-Methyl-2-pentanone	Ave	0.3834	0.3876	0.0500	0.0404	0.0400	1.1	50.0
Toluene	Ave	1.674	1.670	0.4000	0.0200	0.0200	-0.2	30.0
trans-1,3-Dichloropropene	Ave	0.5418	0.5319	0.1000	0.0196	0.0200	-1.8	30.0
Ethyl methacrylate	Ave	0.5220	0.5312		0.0204	0.0200	1.8	30.0
1,1,2-Trichloroethane	Ave	0.3327	0.3406	0.1000	0.0205	0.0200	2.4	30.0
Tetrachloroethene	Ave	0.4449	0.4485	0.1500	0.0202	0.0200	0.8	30.0
1,3-Dichloropropane	Ave	0.5898	0.5904		0.0200	0.0200	0.1	30.0
2-Hexanone	Ave	0.4000	0.4074	0.0500	0.0407	0.0400	1.9	50.0
Dibromochloromethane	Ave	0.3454	0.3577		0.0207	0.0200	3.6	30.0
1,2-Dibromoethane	Ave	0.3578	0.3607		0.0202	0.0200	0.8	30.0
Chlorobenzene	Ave	1.080	1.065	0.3000	0.0197	0.0200	-1.4	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3776	0.3797		0.0201	0.0200	0.6	30.0
Ethylbenzene	Ave	0.6029	0.6034		0.0200	0.0200	0.0	30.0
m-Xylene & p-Xylene	Ave	0.7480	0.7610		0.0203	0.0200	1.7	30.0
o-Xylene	Ave	0.7560	0.7537		0.0199	0.0200	-0.3	30.0
Styrene	Ave	1.213	1.155	0.3000	0.0191	0.0200	-4.7	30.0
Bromoform	Ave	0.2499	0.2587	0.1000	0.0207	0.0200	3.5	30.0
Isopropylbenzene	Ave	1.969	2.009	0.1000	0.0204	0.0200	2.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9843	1.035	0.3000	0.0210	0.0200	5.1	30.0
Bromobenzene	Ave	0.8666	0.8526		0.0197	0.0200	-1.6	30.0
1,2,3-Trichloropropane	Ave	0.3726	0.3857		0.0207	0.0200	3.5	30.0
trans-1,4-Dichloro-2-butene	Ave	0.3189	0.3232		0.0203	0.0200	1.4	30.0
n-Propylbenzene	Ave	0.9864	1.003		0.0203	0.0200	1.7	30.0
2-Chlorotoluene	Ave	0.8263	0.8265		0.0200	0.0200	0.0	30.0
1,3,5-Trimethylbenzene	Ave	2.842	2.880		0.0203	0.0200	1.3	30.0
4-Chlorotoluene	Ave	0.8528	0.8188		0.0192	0.0200	-4.0	30.0
tert-Butylbenzene	Ave	2.582	2.643		0.0205	0.0200	2.4	30.0
1,2,4-Trimethylbenzene	Ave	2.944	2.923		0.0199	0.0200	-0.7	30.0
sec-Butylbenzene	Ave	3.717	3.788		0.0204	0.0200	1.9	30.0
1,3-Dichlorobenzene	Ave	1.707	1.638	0.6000	0.0192	0.0200	-4.1	30.0
p-Isopropyltoluene	Ave	3.214	3.318		0.0206	0.0200	3.2	30.0
1,4-Dichlorobenzene	Ave	1.756	1.667	0.5000	0.0190	0.0200	-5.0	30.0
n-Butylbenzene	Ave	2.741	2.726		0.0199	0.0200	-0.6	30.0
1,2-Dichlorobenzene	Ave	1.655	1.606	0.4000	0.0194	0.0200	-2.9	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-378870/15 Calibration Date: 04/30/2019 16:46

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1269802.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.3213	0.3347	0.0500	0.0208	0.0200	4.2	50.0
1,2,4-Trichlorobenzene	Ave	1.156	1.069	0.2000	0.0185	0.0200	-7.5	50.0
Hexachlorobutadiene	Ave	0.5105	0.4509		0.0177	0.0200	-11.7	50.0
Naphthalene	Ave	3.623	3.581		0.0198	0.0200	-1.2	50.0
1,2,3-Trichlorobenzene	Ave	1.070	0.9941		0.0186	0.0200	-7.1	30.0
Dibromofluoromethane (Surr)	Ave	0.2660	0.2632		0.0198	0.0200	-1.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2988	0.2950		0.0197	0.0200	-1.3	30.0
Toluene-d8 (Surr)	Ave	1.417	1.397		0.0197	0.0200	-1.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5219	0.5000		0.0192	0.0200	-4.2	30.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 17:52 Calibration End Date: 04/30/2019 20:05 Calibration ID: 50829

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-378870/24	U1269811.D
Level 2	STDA9 240-378870/23	U1269810.D
Level 3	STDA9 240-378870/22	U1269809.D
Level 4	STDA9 240-378870/21	U1269808.D
Level 5	STDA9 240-378870/20	U1269807.D
Level 6	STDA9 240-378870/19	U1269806a.D
Level 7	STDA9 240-378870/18	U1269805.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	+++++ 0.0577	0.1078 0.0596	0.0682	0.0691	0.0636	Lin1	0.5602	0.0598				9.5			0.9970		0.9900
Diisopropyl ether	0.2929 0.2738	0.2765 0.2696	0.2366	0.2613	0.2780	Ave		0.2698				6.5		20.0			
2-Chloro-1,3-butadiene	0.4786 0.4680	0.4584 0.4733	0.3826	0.4441	0.4787	Ave		0.4548				7.5		20.0			
Ethyl-t-butyl ether (ETBE)	0.9231 0.8774	0.9560 0.8757	0.7996	0.8502	0.8967	Ave		0.8827				5.7		20.0			
Ethyl acetate	0.3760 0.3469	0.3982 0.3449	0.3438	0.3893	0.3652	Ave		0.3663				6.1		20.0			
Propionitrile	+++++ 0.0732	0.1272 0.0718	0.0809	0.0836	0.0763	Lin1	0.6174	0.0731				7.6			0.9980		0.9900
Methacrylonitrile	0.2701 0.2172	0.3179 0.2133	0.2341	0.2476	0.2295	Ave		0.2471				14.8		20.0			
Tert-amyl-methyl ether (TAME)	0.9292 0.8961	1.0049 0.8887	0.8413	0.8660	0.9194	Ave		0.9065				5.8		20.0			
n-Butanol	+++++ 0.0209	0.0329 0.0206	0.0222	0.0238	0.0217	Ave		0.0237				19.8		20.0			
Ethyl acrylate	0.3529 0.3862	0.3726 0.3785	0.3551	0.4376	0.4033	Ave		0.3838				7.7		20.0			
Methyl methacrylate	0.2476 0.2428	0.2675 0.2448	0.2382	0.2817	0.2626	Ave		0.2550				6.2		20.0			
2-Nitropropane	0.0709 0.0758	0.0875 0.0776	0.0674	0.0807	0.0782	Ave		0.0769				8.5		20.0			
n-Butyl acetate	0.6652 0.7069	0.7222 0.6984	0.6558	0.7261	0.7418	Ave		0.7023				4.5		20.0			
1-Chlorohexane	0.6537 0.5756	0.5752 0.5744	0.4577	0.5686	0.5992	Ave		0.5721				10.2		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 17:52 Calibration End Date: 04/30/2019 20:05 Calibration ID: 50829

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	+++++ 0.0254	0.0488 0.0260	0.0323	0.0327	0.0271	Lin1	0.2887	0.0263				16.6			0.9940		0.9900
Pentachloroethane	0.4041 0.4805	0.3994 0.4895	0.3847	0.4448	0.5013	Ave		0.4435				10.8		20.0			
1,2,3-Trimethylbenzene	3.0615 3.0093	2.9218 3.0278	2.5419	2.9248	3.1903	Ave		2.9539				6.9		20.0			
Benzyl chloride	2.0905 2.1764	2.1592 2.2087	1.9104	2.1155	2.2664	Ave		2.1325				5.3		20.0			
1,3,5-Trichlorobenzene	1.4854 1.1716	1.4735 1.1754	1.0388	1.2095	1.2541	Ave		1.2583				13.1		20.0			
2-Methylnaphthalene	+++++ 1.7667	4.7158 1.7419	2.2446	2.4328	1.9992	Ave		2.4835				45.3	*	20.0			
1-Chloro-1-fluoroethane TIC	0.2127 0.2309	0.2361 0.2314	0.1893	0.2219	0.2344	Ave		0.2224				7.5		20.0			

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 17:52 Calibration End Date: 04/30/2019 20:05 Calibration ID: 50829

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-378870/24	U1269811.D
Level 2	STDA9 240-378870/23	U1269810.D
Level 3	STDA9 240-378870/22	U1269809.D
Level 4	STDA9 240-378870/21	U1269808.D
Level 5	STDA9 240-378870/20	U1269807.D
Level 6	STDA9 240-378870/19	U1269806a.D
Level 7	STDA9 240-378870/18	U1269805.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acetonitrile	FB	Lin1	+++++ 2101087	63285 2937339	409382	871009	1532543	+++++ 600	10.0 800	100	200	400
Diisopropyl ether	FB	Ave	8647 996957	16227 1328252	141946	329172	669786	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chloro-1,3-butadiene	FB	Ave	14129 1704173	26905 2331461	229589	559516	1153399	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	27251 3195035	56113 4314222	479805	1071213	2160558	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl acetate	FB	Ave	22198 2526193	46743 3398125	412608	980925	1760036	1.00 120	2.00 160	20.0	40.0	80.0
Propionitrile	FB	Lin1	+++++ 2665338	74659 3538021	485430	1053523	1837399	+++++ 600	10.0 800	100	200	400
Methacrylonitrile	FB	Ave	79733 7907632	186608 10507625	1404926	3119038	5530137	5.00 600	10.0 800	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	27432 3262969	58983 4378322	504826	1091058	2215191	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Butanol	FB	Ave	+++++ 1898282	48347 2536242	333535	748361	1305583	+++++ 1500	25.0 2000	250	500	1000
Ethyl acrylate	FB	Ave	10419 1406385	21871 1864766	213092	551287	971753	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl methacrylate	FB	Ave	14620 1767987	31407 2411882	285867	709925	1265557	1.00 120	2.00 160	20.0	40.0	80.0
2-Nitropropane	FB	Ave	4184 551865	10267 764598	80875	203229	377049	1.00 120	2.00 160	20.0	40.0	80.0
n-Butyl acetate	CBNZ d5	Ave	12754 1668759	27432 2199815	254037	629474	1173240	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1-Chlorohexane	CBNZ d5	Ave	12533 1358865	21851 1809238	177328	492974	947724	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Cyclohexanone	CBNZ d5	Lin1	+++++ 599459	18555 818532	124978	283168	429161	+++++ 600	10.0 800	100	200	400

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 17:52 Calibration End Date: 04/30/2019 20:05 Calibration ID: 50829

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Pentachloroethane	DCBd 4	Ave	8865 1304124	17876 1762320	166979	425029	878170	1.00 120	2.00 160	20.0	40.0	80.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	33584 4083704	65393 5450282	551639	1397402	2794328	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Benzyl chloride	DCBd 4	Ave	22933 2953444	48324 3975844	414592	1010740	1985115	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	16295 1589890	32979 2115775	225441	577890	1098427	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Methylnaphthalene	DCBd 4	Ave	+++++ 4794940	211087 6271239	974233	2324694	3502147	+++++ 120	2.00 160	20.0	40.0	80.0
1-Chloro-1-fluoroethane TIC	FB	Ave	6280 840871	13857 1139881	113596	279594	564873	0.500 60.0	1.00 80.0	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 17:52 Calibration End Date: 04/30/2019 20:05 Calibration ID: 50829

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-378870/24	U1269811.D
Level 2	STDA9 240-378870/23	U1269810.D
Level 3	STDA9 240-378870/22	U1269809.D
Level 4	STDA9 240-378870/21	U1269808.D
Level 5	STDA9 240-378870/20	U1269807.D
Level 6	STDA9 240-378870/19	U1269806a.D
Level 7	STDA9 240-378870/18	U1269805.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Acetonitrile	+++++	-13.3						50				
Propionitrile	+++++	-10.5						50				
Cyclohexanone	+++++	-23.9						50				

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-378870/25 Calibration Date: 04/30/2019 20:27

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1269812.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2660	0.2521		0.0190	0.0200	-5.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2988	0.2907		0.0195	0.0200	-2.7	30.0
Toluene-d8 (Surr)	Ave	1.417	1.342		0.0189	0.0200	-5.3	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5219	0.4893		0.0188	0.0200	-6.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-378870/25 Calibration Date: 04/30/2019 20:27

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 17:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 20:05

Lab File ID: U1269812.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Lin1		0.0552		0.175	0.200	-12.3	30.0
Diisopropyl ether	Ave	0.2698	0.2559		0.0190	0.0200	-5.2	30.0
2-Chloro-1,3-butadiene	Ave	0.4548	0.4546		0.0200	0.0200	-0.0	30.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8827	0.8165		0.0185	0.0200	-7.5	30.0
Ethyl acetate	Ave	0.3663	0.3852		0.0421	0.0400	5.1	30.0
Propionitrile	Lin1		0.0721		0.189	0.200	-5.7	30.0
Methacrylonitrile	Ave	0.2471	0.2359		0.191	0.200	-4.5	30.0
Tert-amyl-methyl ether (TAME)	Ave	0.9065	0.8735		0.0193	0.0200	-3.6	30.0
n-Butanol	Ave	0.0237	0.0184		0.388	0.500	-22.4	30.0
Ethyl acrylate	Ave	0.3838	0.4392		0.0229	0.0200	14.4	30.0
Methyl methacrylate	Ave	0.2550	0.2817		0.0442	0.0400	10.4	30.0
2-Nitropropane	Ave	0.0769	0.0706		0.0368	0.0400	-8.1	30.0
n-Butyl acetate	Ave	0.7023	0.7079		0.0202	0.0200	0.8	30.0
1-Chlorohexane	Ave	0.5721	0.5724		0.0200	0.0200	0.0	30.0
Cyclohexanone	Lin1		0.0233		0.166	0.200	-16.8	30.0
Pentachloroethane	Ave	0.4435	0.4317		0.0389	0.0400	-2.7	30.0
1,2,3-Trimethylbenzene	Ave	2.954	2.951		0.0200	0.0200	-0.1	30.0
Benzyl chloride	Ave	2.132	1.954		0.0183	0.0200	-8.4	30.0
1,3,5-Trichlorobenzene	Ave	1.258	1.110		0.0176	0.0200	-11.8	30.0
2-Methylnaphthalene	Ave	2.484	1.588		0.0256	0.0400	-36.1*	30.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: BFB4196.D BFB Injection Date: 08/20/2019

Instrument ID: A3UX12 BFB Injection Time: 15:53

Analysis Batch No.: 396858

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.2	
75	30.0 - 60.0 % of mass 95	50.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	94.1	
175	5.0 - 9.0 % of mass 174	7.0	(7.4) 1
176	95.0 - 101.0 % of mass 174	92.0	(97.8) 1
177	5.0 - 9.0 % of mass 176	6.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-396858/3	U1272399.D	08/20/2019	16:16
	CCVIS 240-396858/4	U1272400.D	08/20/2019	16:38
	LCS 240-396858/5	U1272401.D	08/20/2019	17:01
	MB 240-396858/7	U1272403.D	08/20/2019	17:46
TB-080819	240-117170-41	U1272409.D	08/20/2019	19:39
MSA-SW46A-080819	240-117170-42	U1272410.D	08/20/2019	20:01
MSA-SW47A-080819	240-117170-43	U1272411.D	08/20/2019	20:24
MSA-SW48A-080819	240-117170-44	U1272412.D	08/20/2019	20:47
MSA-SW49A-080819	240-117170-45	U1272413.D	08/20/2019	21:10

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCV 240-396858/3 Calibration Date: 08/20/2019 16:16

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 17:52

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 20:05

Lab File ID: U1272399.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Lin1		0.0514		0.163	0.200	-18.7	20.0
Diisopropyl ether	Ave	0.2698	0.2668		0.0198	0.0200	-1.1	20.0
2-Chloro-1,3-butadiene	Ave	0.4548	0.4778		0.0210	0.0200	5.1	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8827	0.8322		0.0189	0.0200	-5.7	20.0
Ethyl acetate	Ave	0.3663	0.3864		0.0422	0.0400	5.5	20.0
Propionitrile	Lin1		0.0670		0.175	0.200	-12.6	20.0
Methacrylonitrile	Ave	0.2471	0.2369		0.192	0.200	-4.1	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.9065	0.9671		0.0213	0.0200	6.7	20.0
n-Butanol	Ave	0.0237	0.0160		0.338	0.500	-32.5*	20.0
Ethyl acrylate	Ave	0.3838	0.4724		0.0246	0.0200	23.1*	20.0
Methyl methacrylate	Ave	0.2550	0.3024		0.0474	0.0400	18.6	20.0
2-Nitropropane	Ave	0.0769	0.0949		0.0494	0.0400	23.5*	20.0
n-Butyl acetate	Ave	0.7023	0.7189		0.0205	0.0200	2.4	20.0
1-Chlorohexane	Ave	0.5721	0.5987		0.0209	0.0200	4.7	20.0
Cyclohexanone	Lin1		0.0200		0.142	0.200	-29.2*	20.0
Pentachloroethane	Ave	0.4435	0.4569		0.0412	0.0400	3.0	20.0
1,2,3-Trimethylbenzene	Ave	2.954	2.772		0.0188	0.0200	-6.2	20.0
Benzyl chloride	Ave	2.132	2.003		0.0188	0.0200	-6.1	20.0
1,3,5-Trichlorobenzene	Ave	1.258	0.9557		0.0152	0.0200	-24.0*	20.0
2-Methylnaphthalene	Ave	2.484	1.401		0.0226	0.0400	-43.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-396858/4 Calibration Date: 08/20/2019 16:38

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1272400.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	0.3850	0.3444	0.1000	0.0179	0.0200	-10.5	20.0
Chloromethane	Ave	0.3374	0.2134	0.1000	0.0126	0.0200	-36.8*	20.0
Butadiene	Ave	0.3709	0.3280		0.0177	0.0200	-11.6	20.0
Vinyl chloride	Ave	0.3771	0.3454	0.1000	0.0183	0.0200	-8.4	20.0
Bromomethane	Ave	0.2328	0.2490	0.0500	0.0214	0.0200	7.0	20.0
Chloroethane	Ave	0.2368	0.2353	0.0500	0.0199	0.0200	-0.7	20.0
Dichlorofluoromethane	Ave	0.4732	0.5261		0.0222	0.0200	11.2	20.0
Trichlorofluoromethane	Ave	0.4204	0.5037	0.1000	0.0240	0.0200	19.8	20.0
Ethyl ether	Ave	0.2526	0.2421		0.0192	0.0200	-4.1	20.0
Acrolein	Ave	0.0755	0.0436		0.0577	0.100	-42.3*	20.0
1,1-Dichloroethene	Ave	0.4135	0.4317	0.1000	0.0209	0.0200	4.4	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2737	0.3013	0.0500	0.0220	0.0200	10.1	20.0
Acetone	Lin1		0.1198	0.0100	0.0321	0.0400	-19.8	50.0
Iodomethane	Ave	0.4395	0.4750		0.0216	0.0200	8.1	20.0
Carbon disulfide	Ave	0.9516	0.8816	0.1000	0.0185	0.0200	-7.4	20.0
3-Chloro-1-propene	Ave	0.4714	0.4098		0.0174	0.0200	-13.1	20.0
Methyl acetate	Ave	0.3480	0.3015	0.1000	0.0347	0.0400	-13.4	50.0
Methylene Chloride	Lin1		0.3400	0.1000	0.0175	0.0200	-12.7	50.0
tert-Butyl alcohol	Ave	0.0732	0.0371		0.101	0.200	-49.3*	20.0
Acrylonitrile	Ave	0.1811	0.1440		0.159	0.200	-20.5*	20.0
Methyl tert-butyl ether	Ave	0.8398	0.8345	0.1000	0.0199	0.0200	-0.6	20.0
trans-1,2-Dichloroethene	Ave	0.4063	0.3962	0.1000	0.0195	0.0200	-2.5	20.0
Hexane	Ave	0.4435	0.4527		0.0204	0.0200	2.1	20.0
1,1-Dichloroethane	Ave	0.5067	0.4907	0.2000	0.0194	0.0200	-3.2	20.0
Vinyl acetate	Ave	0.5694	0.5851		0.0205	0.0200	2.7	20.0
2,2-Dichloropropane	Ave	0.3288	0.3029		0.0184	0.0200	-7.9	20.0
cis-1,2-Dichloroethene	Ave	0.3444	0.3227	0.1000	0.0187	0.0200	-6.3	20.0
2-Butanone	Ave	0.0623	0.0596	0.0100	0.0383	0.0400	-4.3	50.0
Bromochloromethane	Ave	0.2413	0.2280		0.0189	0.0200	-5.5	20.0
Tetrahydrofuran	Ave	0.1500	0.1325		0.0353	0.0400	-11.7	20.0
Chloroform	Ave	0.4844	0.4917	0.2000	0.0203	0.0200	1.5	20.0
1,1,1-Trichloroethane	Ave	0.4157	0.4409	0.1000	0.0212	0.0200	6.1	20.0
Cyclohexane	Ave	0.5049	0.4937	0.1000	0.0196	0.0200	-2.2	20.0
1,1-Dichloropropene	Ave	0.4109	0.4223		0.0206	0.0200	2.8	20.0
Carbon tetrachloride	Ave	0.3534	0.3826	0.1000	0.0217	0.0200	8.3	20.0
Isobutyl alcohol	Ave	0.0199	0.0152		0.381	0.500	-23.8*	20.0
Benzene	Ave	1.178	1.169	0.5000	0.0199	0.0200	-0.7	20.0
1,2-Dichloroethane	Ave	0.3625	0.3854	0.1000	0.0213	0.0200	6.3	20.0
n-Heptane	Lin1		0.2236		0.0185	0.0200	-7.6	20.0
Trichloroethene	Ave	0.3152	0.3252	0.1500	0.0206	0.0200	3.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-396858/4 Calibration Date: 08/20/2019 16:38

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1272400.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5644	0.5427	0.1000	0.0192	0.0200	-3.8	20.0
1,2-Dichloropropane	Ave	0.2488	0.2541	0.1000	0.0204	0.0200	2.1	20.0
Dibromomethane	Ave	0.2110	0.2041		0.0193	0.0200	-3.3	20.0
1,4-Dioxane	Ave	0.0040	0.0042		0.419	0.400	4.7	50.0
Bromodichloromethane	Ave	0.3396	0.3519	0.1500	0.0207	0.0200	3.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1806	0.2023		0.0448	0.0400	12.0	20.0
cis-1,3-Dichloropropene	Ave	0.4134	0.4319	0.1500	0.0209	0.0200	4.5	50.0
4-Methyl-2-pentanone	Ave	0.3834	0.3743	0.0500	0.0391	0.0400	-2.4	50.0
Toluene	Ave	1.674	1.622	0.4000	0.0194	0.0200	-3.1	20.0
trans-1,3-Dichloropropene	Ave	0.5418	0.5380	0.1000	0.0199	0.0200	-0.7	20.0
Ethyl methacrylate	Ave	0.5220	0.5318		0.0204	0.0200	1.9	20.0
1,1,2-Trichloroethane	Ave	0.3327	0.3251	0.1000	0.0195	0.0200	-2.3	20.0
Tetrachloroethene	Ave	0.4449	0.4414	0.1500	0.0198	0.0200	-0.8	20.0
1,3-Dichloropropane	Ave	0.5898	0.5821		0.0197	0.0200	-1.3	20.0
2-Hexanone	Ave	0.4000	0.3956	0.0500	0.0396	0.0400	-1.1	50.0
Dibromochloromethane	Ave	0.3454	0.3393		0.0196	0.0200	-1.8	20.0
1,2-Dibromoethane	Ave	0.3578	0.3554		0.0199	0.0200	-0.7	20.0
Chlorobenzene	Ave	1.080	1.021	0.3000	0.0189	0.0200	-5.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3776	0.3522		0.0187	0.0200	-6.7	20.0
Ethylbenzene	Ave	0.6029	0.5766		0.0191	0.0200	-4.4	20.0
m-Xylene & p-Xylene	Ave	0.7480	0.7170		0.0192	0.0200	-4.1	20.0
o-Xylene	Ave	0.7560	0.6928		0.0183	0.0200	-8.4	20.0
Styrene	Ave	1.213	1.139	0.3000	0.0188	0.0200	-6.1	20.0
Bromoform	Ave	0.2499	0.2464	0.1000	0.0197	0.0200	-1.4	20.0
Isopropylbenzene	Ave	1.969	1.808	0.1000	0.0184	0.0200	-8.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9843	0.9837	0.3000	0.0200	0.0200	-0.0	20.0
Bromobenzene	Ave	0.8666	0.8487		0.0196	0.0200	-2.1	20.0
1,2,3-Trichloropropane	Ave	0.3726	0.3623		0.0195	0.0200	-2.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3189	0.3389		0.0213	0.0200	6.3	20.0
n-Propylbenzene	Ave	0.9864	0.9752		0.0198	0.0200	-1.1	20.0
2-Chlorotoluene	Ave	0.8263	0.7982		0.0193	0.0200	-3.4	20.0
1,3,5-Trimethylbenzene	Ave	2.842	2.741		0.0193	0.0200	-3.5	20.0
4-Chlorotoluene	Ave	0.8528	0.8203		0.0192	0.0200	-3.8	20.0
tert-Butylbenzene	Ave	2.582	2.503		0.0194	0.0200	-3.1	20.0
1,2,4-Trimethylbenzene	Ave	2.944	2.725		0.0185	0.0200	-7.4	20.0
sec-Butylbenzene	Ave	3.717	3.459		0.0186	0.0200	-6.9	20.0
1,3-Dichlorobenzene	Ave	1.707	1.556	0.6000	0.0182	0.0200	-8.9	20.0
p-Isopropyltoluene	Ave	3.214	2.966		0.0185	0.0200	-7.7	20.0
1,4-Dichlorobenzene	Ave	1.756	1.560	0.5000	0.0178	0.0200	-11.1	20.0
n-Butylbenzene	Ave	2.741	2.399		0.0175	0.0200	-12.5	20.0
1,2-Dichlorobenzene	Ave	1.655	1.476	0.4000	0.0178	0.0200	-10.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-396858/4 Calibration Date: 08/20/2019 16:38

Instrument ID: A3UX12 Calib Start Date: 04/30/2019 14:10

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/30/2019 16:24

Lab File ID: U1272400.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.3213	0.2657	0.0500	0.0165	0.0200	-17.3	50.0
1,2,4-Trichlorobenzene	Ave	1.156	0.7684	0.2000	0.0133	0.0200	-33.5	50.0
Hexachlorobutadiene	Ave	0.5105	0.3222		0.0126	0.0200	-36.9	50.0
Naphthalene	Ave	3.623	2.732		0.0151	0.0200	-24.6	50.0
1,2,3-Trichlorobenzene	Ave	1.070	0.7174		0.0134	0.0200	-33.0*	20.0
Dibromofluoromethane (Surr)	Ave	0.2660	0.2622		0.0197	0.0200	-1.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2988	0.3066		0.0205	0.0200	2.6	20.0
Toluene-d8 (Surr)	Ave	1.417	1.324		0.0187	0.0200	-6.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5219	0.4855		0.0186	0.0200	-7.0	20.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: bfb036.d BFB Injection Date: 07/24/2018

Instrument ID: A3UX19 BFB Injection Time: 17:22

Analysis Batch No.: 337766

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.1	
75	30.0 - 60.0 % of mass 95	53.5	
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	1.1	(1.2) 1
174	50.0 - 120.00 % of mass 95	84.3	
175	5.0 - 9.0 % of mass 174	6.2	(7.4) 1
176	95.0 - 101.0 % of mass 174	80.7	(95.7) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-337766/2	U1900783.d	07/24/2018	17:50
	STD8260 240-337766/3	U1900784.d	07/24/2018	18:13
	STD8260 240-337766/9	U1900790.d	07/24/2018	18:35
	ICIS 240-337766/10	U1900791.d	07/24/2018	18:57
	STD8260 240-337766/11	U1900792.d	07/24/2018	19:20
	STD8260 240-337766/12	U1900793.d	07/24/2018	19:42
	STD8260 240-337766/13	U1900794.d	07/24/2018	20:04

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-337766/13	U1900794.d
Level 2	STD8260 240-337766/12	U1900793.d
Level 3	STD8260 240-337766/11	U1900792.d
Level 4	ICIS 240-337766/10	U1900791.d
Level 5	STD8260 240-337766/9	U1900790.d
Level 6	STD8260 240-337766/3	U1900784.d
Level 7	STD8260 240-337766/2	U1900783.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2985 0.3869	0.3275 0.3899	0.3189	0.3531	0.3613	Ave		0.3480			0.1000	10.0		20.0			
Chloromethane	0.3558 0.3258	0.3705 0.3191	0.3263	0.3392	0.3223	Ave		0.3370			0.1000	5.8		20.0			
Butadiene	0.3408 0.3374	0.3424 0.3377	0.2895	0.3248	0.3219	Ave		0.3278				5.7		20.0			
Vinyl chloride	0.2746 0.3390	0.3544 0.3374	0.3113	0.3366	0.3288	Ave		0.3260			0.1000	8.0		20.0			
Bromomethane	0.2749 0.2254	0.2866 0.2173	0.2405	0.2466	0.2251	Ave		0.2452			0.0500	10.8		20.0			
Chloroethane	0.2109 0.1921	0.2097 0.1854	0.1960	0.2032	0.1901	Ave		0.1982			0.0500	5.0		20.0			
Dichlorofluoromethane	0.5221 0.4475	0.4917 0.4372	0.4526	0.4727	0.4486	Ave		0.4675				6.5		20.0			
Trichlorofluoromethane	0.4494 0.4561	0.4680 0.4427	0.3932	0.4472	0.4396	Ave		0.4423			0.1000	5.3		20.0			
Ethyl ether	0.2193 0.1979	0.2111 0.1891	0.1902	0.1939	0.1890	Ave		0.1987				6.0		20.0			
Acrolein	0.0586 0.0546	0.0507 0.0535	0.0446	0.0490	0.0542	Ave		0.0522				8.7		20.0			
1,1-Dichloroethene	0.3808 0.3850	0.3828 0.3735	0.3902	0.3740	0.3655	Ave		0.3788			0.1000	2.2		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2602 0.2706	0.2860 0.2683	0.2820	0.2661	0.2580	Ave		0.2702			0.0500	3.9		20.0			
Acetone	+++++ 0.0784	0.0790 0.0643	0.0549	0.0580	0.0606	Ave		0.0659			0.0100	15.8		20.0			
Iodomethane	0.4645 0.4649	0.4824 0.4542	0.4796	0.4736	0.4610	Ave		0.4686				2.2		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	1.0264 0.7904	0.9769 0.7703	0.8143	0.7839	0.7630	Ave		0.8465			0.1000	12.8		20.0			
3-Chloro-1-propene	0.4236 0.3955	0.4245 0.3845	0.3864	0.3828	0.3812	Ave		0.3969				4.8		20.0			
Methyl acetate	0.2893 0.2388	0.2199 0.2093	0.2069	0.2105	0.2113	Ave		0.2266			0.1000	13.1		20.0			
Methylene Chloride	+++++ 0.2977	0.3380 0.2854	0.3031	0.3009	0.2892	Ave		0.3024			0.1000	6.2		20.0			
2-Methyl-2-propanol	+++++ 0.0272	0.0286 +++++	0.0233	0.0231	0.0210	Ave		0.0246				12.8		20.0			
Acrylonitrile	0.1149 0.1149	0.0936 0.0991	0.0942	0.0985	0.1008	Ave		0.1023				8.8		20.0			
trans-1,2-Dichloroethene	0.4272 0.3621	0.3980 0.3508	0.3681	0.3544	0.3490	Ave		0.3728			0.1000	7.8		20.0			
Methyl tert-butyl ether	0.6889 0.7038	0.7226 0.6502	0.7037	0.7046	0.6888	Ave		0.6946			0.1000	3.3		20.0			
Hexane	0.4016 0.4127	0.4088 0.4136	0.4369	0.3839	0.3905	Ave		0.4069				4.3		20.0			
1,1-Dichloroethane	0.4297 0.4479	0.4309 0.4358	0.4483	0.4451	0.4391	Ave		0.4395			0.2000	1.8		20.0			
Vinyl acetate	0.4180 0.4211	0.3784 0.4083	0.3943	0.3850	0.3928	Ave		0.3997				4.1		20.0			
cis-1,2-Dichloroethene	0.3259 0.3058	0.3308 0.2928	0.3020	0.3030	0.2971	Ave		0.3082			0.1000	4.7		20.0			
2-Butanone (MEK)	+++++ 0.0411	0.0357 0.0381	0.0358	0.0358	0.0391	Ave		0.0376			0.0100	6.0		20.0			
2,2-Dichloropropane	0.2667 0.2404	0.2856 0.2633	0.2822	0.2661	0.2457	Ave		0.2643				6.4		20.0			
Chlorobromomethane	0.2447 0.2004	0.2207 0.1830	0.1878	0.1937	0.1884	Ave		0.2027				11.0		20.0			
Tetrahydrofuran	0.0995 0.1054	0.1040 0.0940	0.0907	0.0913	0.0950	Ave		0.0971				6.1		20.0			
Chloroform	0.4629 0.4616	0.4798 0.4429	0.4485	0.4541	0.4433	Ave		0.4561			0.2000	2.9		20.0			
1,1,1-Trichloroethane	0.3956 0.4177	0.3988 0.4154	0.4324	0.4070	0.4089	Ave		0.4108			0.1000	3.0		20.0			
Cyclohexane	0.4246 0.4364	0.4382 0.4292	0.4507	0.4156	0.4161	Ave		0.4301			0.1000	3.0		20.0			
1,1-Dichloropropene	0.3755 0.3758	0.3903 0.3692	0.3840	0.3595	0.3614	Ave		0.3737				3.0		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.3639 0.3981	0.3846 0.3917	0.3944	0.3722	0.3729	Ave		0.3825			0.1000	3.4		20.0			
Isobutyl alcohol	0.0095 0.0104	0.0071 0.0087	0.0088	0.0079	0.0092	Ave		0.0088				12.2		20.0			
Benzene	0.9890 1.0452	1.0827 1.0051	1.0373	1.0007	1.0215	Ave		1.0259			0.5000	3.1		20.0			
1,2-Dichloroethane	0.3674 0.3257	0.3549 0.3127	0.3205	0.3110	0.3150	Ave		0.3296			0.1000	6.8		20.0			
n-Heptane	+++++ 0.2252	0.7970 0.2266	0.2839	0.2324	0.2217	Lin1	0.5799	0.2147				4.3			0.9990		0.9900
Trichloroethene	0.3122 0.3167	0.3258 0.3140	0.3258	0.3068	0.3105	Ave		0.3160			0.1500	2.3		20.0			
Methylcyclohexane	0.4985 0.5342	0.5073 0.5200	0.5394	0.4970	0.4957	Ave		0.5132			0.1000	3.6		20.0			
1,2-Dichloropropane	0.2050 0.2404	0.2394 0.2326	0.2309	0.2270	0.2376	Ave		0.2304			0.1000	5.3		20.0			
Dibromomethane	0.2379 0.2151	0.2154 0.2010	0.2009	0.2115	0.2105	Ave		0.2132				5.8		20.0			
1,4-Dioxane	+++++ 0.0024	0.0017 0.0024	0.0024	0.0024	0.0023	Ave		0.0023				13.5		20.0			
Dichlorobromomethane	0.3232 0.3408	0.3027 0.3295	0.3203	0.3127	0.3310	Ave		0.3229			0.1500	3.9		20.0			
2-Chloroethyl vinyl ether	0.1601 0.1755	0.1580 0.1783	0.1797	0.1698	0.1774	Ave		0.1713				5.2		20.0			
cis-1,3-Dichloropropene	0.3599 0.3873	0.3811 0.3872	0.3686	0.3735	0.3865	Ave		0.3777			0.1500	2.8		20.0			
4-Methyl-2-pentanone (MIBK)	0.2834 0.3221	0.2998 0.3046	0.3240	0.2983	0.3095	Ave		0.3059			0.0500	4.6		20.0			
Toluene	1.5618 1.4027	1.4672 1.4180	1.4098	1.3276	1.3894	Ave		1.4252			0.4000	5.1		20.0			
trans-1,3-Dichloropropene	0.4760 0.4702	0.4587 0.4631	0.4478	0.4252	0.4649	Ave		0.4580			0.1000	3.7		20.0			
Ethyl methacrylate	0.4185 0.4604	0.4061 0.4531	0.4309	0.4112	0.4583	Ave		0.4341				5.3		20.0			
1,1,2-Trichloroethane	0.2547 0.2895	0.2773 0.2862	0.2834	0.2725	0.2908	Ave		0.2792			0.1000	4.5		20.0			
Tetrachloroethene	0.4086 0.4320	0.4228 0.4317	0.4309	0.4048	0.4173	Ave		0.4212			0.1500	2.7		20.0			
1,3-Dichloropropane	0.4853 0.4890	0.5028 0.4855	0.4893	0.4635	0.4865	Ave		0.4860				2.4		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.2860 0.3061	0.2740 0.2989	0.3048	0.2770	0.2999	Ave		0.2924			0.0500	4.5		20.0			
Chlorodibromomethane	0.3153 0.3531	0.3347 0.3456	0.3254	0.3197	0.3424	Ave		0.3337				4.2		20.0			
Ethylene Dibromide	0.3316 0.3186	0.3371 0.3125	0.3153	0.3013	0.3163	Ave		0.3190				3.8		20.0			
Chlorobenzene	0.9988 0.9439	1.0195 0.9268	0.9392	0.9052	0.9346	Ave		0.9526			0.3000	4.3		20.0			
1,1,1,2-Tetrachloroethane	0.2852 0.3466	0.3288 0.3341	0.3290	0.3310	0.3341	Ave		0.3270				5.9		20.0			
Ethylbenzene	0.4594 0.5246	0.5226 0.5211	0.5127	0.4996	0.5108	Ave		0.5073				4.5		20.0			
m-Xylene & p-Xylene	0.6169 0.6437	0.6148 0.6359	0.6355	0.6137	0.6232	Ave		0.6262				1.9		20.0			
o-Xylene	0.5941 0.6233	0.5896 0.6029	0.6245	0.6014	0.5968	Ave		0.6047				2.3		20.0			
Styrene	0.9580 1.0545	0.9583 1.0320	1.0135	0.9872	1.0201	Ave		1.0034			0.3000	3.7		20.0			
Bromoform	+++++ 0.2846	0.2440 0.2826	0.2606	0.2566	0.2726	Ave		0.2668			0.1000	6.0		20.0			
Isopropylbenzene	1.5546 1.6483	1.5581 1.6164	1.6482	1.5866	1.5868	Ave		1.5999			0.1000	2.4		20.0			
1,1,2,2-Tetrachloroethane	0.7561 0.8073	0.8321 0.7913	0.8175	0.7659	0.8099	Ave		0.7972			0.3000	3.5		20.0			
Bromobenzene	0.8153 0.7490	0.7267 0.7427	0.7731	0.7237	0.7577	Ave		0.7555				4.2		20.0			
1,2,3-Trichloropropane	0.3160 0.2796	0.2566 0.2769	0.2966	0.2651	0.2852	Ave		0.2823				7.0		20.0			
trans-1,4-Dichloro-2-butene	0.2699 0.2473	0.2213 0.2516	0.2435	0.2261	0.2517	Ave		0.2445				6.7		20.0			
N-Propylbenzene	0.7798 0.8210	0.7523 0.8202	0.8514	0.7731	0.8029	Ave		0.8001				4.2		20.0			
2-Chlorotoluene	0.6509 0.6957	0.7125 0.6833	0.7132	0.6770	0.6858	Ave		0.6883				3.1		20.0			
1,3,5-Trimethylbenzene	2.0585 2.3418	2.1282 2.3386	2.4321	2.2627	2.2905	Ave		2.2646				5.7		20.0			
4-Chlorotoluene	0.7199 0.7173	0.7260 0.7141	0.7528	0.6936	0.7171	Ave		0.7201				2.4		20.0			
tert-Butylbenzene	2.0893 2.2086	2.2305 2.1805	2.3049	2.0958	2.1272	Ave		2.1767				3.6		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.3016 2.3641	2.3139 2.3974	2.4350	2.3225	2.3165	Ave		2.3501				2.1		20.0			
sec-Butylbenzene	2.8312 3.0965	2.8639 3.1341	3.2011	2.9684	2.9595	Ave		3.0078				4.6		20.0			
1,3-Dichlorobenzene	1.6206 1.4203	1.5501 1.4165	1.4543	1.3821	1.4074	Ave		1.4645			0.6000	6.0		20.0			
4-Isopropyltoluene	2.3868 2.6740	2.3755 2.7456	2.7383	2.5786	2.5586	Ave		2.5796				5.9		20.0			
1,4-Dichlorobenzene	1.7882 1.4335	1.6574 1.4328	1.4853	1.4002	1.4320	Ave		1.5185			0.5000	9.7		20.0			
n-Butylbenzene	2.0220 2.3242	2.1252 2.3914	2.3447	2.2111	2.1782	Ave		2.2281				5.9		20.0			
1,2-Dichlorobenzene	1.3936 1.3079	1.4283 1.3217	1.3446	1.2913	1.2861	Ave		1.3391			0.4000	4.0		20.0			
1,2-Dibromo-3-Chloropropane	0.2394 0.2501	0.2225 0.2556	0.2287	0.2293	0.2369	Ave		0.2375			0.0500	5.0		20.0			
1,2,4-Trichlorobenzene	1.0063 0.8577	1.0084 0.9508	0.8893	0.8765	0.8484	Ave		0.9196			0.2000	7.4		20.0			
Hexachlorobutadiene	0.4988 0.4431	0.5134 0.5128	0.4874	0.4604	0.4444	Ave		0.4800				6.4		20.0			
Naphthalene	2.5280 2.5374	2.6896 2.7560	2.5594	2.5256	2.5586	Ave		2.5935				3.5		20.0			
1,2,3-Trichlorobenzene	0.8270 0.7867	0.8451 0.9084	0.8355	0.8114	0.8072	Ave		0.8316				4.7		20.0			
Dibromofluoromethane (Surr)	0.2924 0.2586	0.2650 0.2453	0.2515	0.2531	0.2466	Ave		0.2589				6.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3213 0.2669	0.3001 0.2485	0.2625	0.2659	0.2555	Ave		0.2744				9.6		20.0			
Toluene-d8 (Surr)	1.2522 1.2151	1.2033 1.2031	1.2111	1.1433	1.2004	Ave		1.2041				2.7		20.0			
4-Bromofluorobenzene (Surr)	0.5696 0.4390	0.4918 0.4279	0.4472	0.4315	0.4318	Ave		0.4627				11.2		20.0			

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-337766/13	U1900794.d
Level 2	STD8260 240-337766/12	U1900793.d
Level 3	STD8260 240-337766/11	U1900792.d
Level 4	ICIS 240-337766/10	U1900791.d
Level 5	STD8260 240-337766/9	U1900790.d
Level 6	STD8260 240-337766/3	U1900784.d
Level 7	STD8260 240-337766/2	U1900783.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	6894 1134505	14647 1522047	151920	328230	708511	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chloromethane	FB	Ave	8217 955231	16570 1245553	155433	315290	632033	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Butadiene	FB	Ave	7871 989374	15313 1318121	137925	301883	631099	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Vinyl chloride	FB	Ave	6342 993940	15847 1317064	148293	312915	644632	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromomethane	FB	Ave	6350 660888	12818 848050	114577	229239	441425	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chloroethane	FB	Ave	4872 563348	9377 723733	93395	188891	372825	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	12059 1312016	21989 1706469	215631	439391	879608	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	10381 1337225	20928 1728039	187339	415720	861954	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl ether	FB	Ave	5066 580370	9442 738330	90620	180269	370565	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Acrolein	FB	Ave	6772 800130	11339 1043418	106196	227879	531628	2.50 300	5.00 400	50.0	100	200
1,1-Dichloroethene	FB	Ave	8796 1128785	17119 1458107	185910	347690	716665	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	6009 793296	12789 1047375	134365	247358	505930	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Acetone	FB	Ave	+++++ 459712	7064 501797	52355	107763	237768	+++++ 120	2.00 160	20.0	40.0	80.0
Iodomethane	FB	Ave	10728 1363038	21574 1772860	228493	440198	903919	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Carbon disulfide	FB	Ave	23708 2317545	43688 3006958	387941	728690	1496184	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	9784 1159498	18985 1500878	184068	355801	747474	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl acetate	FB	Ave	13362 1400331	19667 1633788	197122	391356	828794	1.00 120	2.00 160	20.0	40.0	80.0
Methylene Chloride	FB	Ave	+++++ 872855	15117 1113978	144386	279726	566982	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
2-Methyl-2-propanol	FB	Ave	+++++ 798354	12788 +++++	110777	215092	411966	+++++ 600	10.0 +++++	100	200	400
Acrylonitrile	FB	Ave	26540 3368428	41875 3868018	448754	915892	1977138	5.00 600	10.0 800	100	200	400
trans-1,2-Dichloroethene	FB	Ave	9868 1061569	17800 1369327	175373	329454	684359	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	15911 2063462	32315 2537900	335243	654948	1350698	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Hexane	FB	Ave	9277 1210166	18280 1614587	208123	356826	765779	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	9924 1313347	19272 1701003	213583	413734	860929	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Vinyl acetate	FB	Ave	9654 1234805	16923 1593713	187841	357825	770166	0.500 60.0	1.00 80.0	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	7528 896669	14795 1142993	143871	281663	582599	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Butanone (MEK)	FB	Ave	+++++ 241145	3193 297238	34072	66486	153177	+++++ 120	2.00 160	20.0	40.0	80.0
2,2-Dichloropropane	FB	Ave	6159 704769	12773 1027916	134434	247316	481767	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	5651 587580	9868 714392	89489	180080	369472	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	4596 618274	9301 734202	86462	169823	372381	1.00 120	2.00 160	20.0	40.0	80.0
Chloroform	FB	Ave	10692 1353439	21458 1728769	213657	422069	869181	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	9137 1224716	17835 1621508	206006	378348	801860	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Cyclohexane	FB	Ave	9806 1279473	19597 1675220	214696	386296	815868	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	8674 1102013	17455 1441115	182947	334178	708682	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	8406 1167256	17198 1528972	187898	345961	731238	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	5482 758926	7910 849021	105355	183028	449380	12.5 1500	25.0 2000	250	500	1000

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	22844 3064496	48419 3923346	494183	930203	2003056	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloroethane	FB	Ave	8485 954899	15873 1220640	152677	289097	617748	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 660181	35642 884598	135257	216048	434651	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
Trichloroethene	FB	Ave	7211 928718	14571 1225880	155201	285190	608912	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	11515 1566351	22689 2029926	256970	461990	972024	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	4734 704987	10704 908144	110015	210992	465852	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dibromomethane	FB	Ave	5496 630606	9635 784539	95707	196594	412829	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	+++++ 142512	1478 187742	23290	43840	91591	+++++ 1200	20.0 1600	200	400	800
Dichlorobromomethane	FB	Ave	7466 999127	13539 1286301	152581	290639	649042	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	7395 1029389	14128 1392220	171233	315645	695808	1.00 120	2.00 160	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	8313 1135535	17042 1511629	175580	347181	757793	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	13091 1889071	26811 2377711	308673	554613	1213622	1.00 120	2.00 160	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	28549 3229981	51989 4260144	544060	985962	2123092	0.500 60.0	1.00 80.0	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	8702 1082760	16254 1391341	172822	315763	710372	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	7650 1060082	14391 1361372	166277	305349	700245	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4656 666583	9825 859718	109350	202390	444369	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	7470 994717	14983 1297004	166266	300622	637692	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	8871 1126088	17817 1458618	188817	344194	743433	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	10457 1409861	19416 1795814	235229	411400	916606	1.00 120	2.00 160	20.0	40.0	80.0
Chlorodibromomethane	CBNZ d5	Ave	5763 813124	11860 1038431	125585	237418	523153	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethylene Dibromide	CBNZ d5	Ave	6061 733594	11944 938884	121691	223763	483377	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	18258 2173534	36126 2784427	362449	672294	1428038	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	5213 798193	11650 1003714	126948	245845	510579	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	8398 1207976	18517 1565528	197845	371072	780525	0.500 60.0	1.00 80.0	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	11276 1482266	21784 1910562	245222	455770	952249	0.500 60.0	1.00 80.0	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	10860 1435324	20892 1811249	240986	446659	911893	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	17512 2428268	33956 3100442	391122	733164	1558780	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	+++++ 655265	8645 849153	100560	190577	416502	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	28418 3795594	55210 4856288	636049	1178300	2424662	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8105 1065677	17817 1352703	173948	331847	686661	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	8740 988831	15559 1269533	164497	313555	642419	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	3387 369092	5494 473318	63108	114884	241838	0.500 60.0	1.00 80.0	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2893 326498	4738 430124	51819	97955	213375	0.500 60.0	1.00 80.0	10.0	20.0	40.0
N-Propylbenzene	DCBd 4	Ave	8359 1083875	16107 1402046	181166	334963	680756	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	6977 918378	15255 1168008	151745	293354	581507	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	22067 3091430	45567 3997648	517511	980405	1942019	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	7717 946982	15545 1220622	160173	300515	607997	0.500 60.0	1.00 80.0	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	22397 2915643	47758 3727392	490442	908078	1803602	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	24672 3120829	49545 4098181	518127	1006317	1964040	0.500 60.0	1.00 80.0	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	30350 4087764	61320 5357379	681132	1286147	2509293	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	17372 1874897	33191 2421314	309437	598840	1193296	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Isopropyltoluene	DCBd 4	Ave	25586 3530033	50862 4693383	582655	1117286	2169356	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	19169 1892443	35488 2449293	316046	606688	1214157	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Butylbenzene	DCBd 4	Ave	21675 3068191	45503 4087812	498908	958018	1846843	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	14939 1726550	30581 2259323	286113	559506	1090448	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	2566 330105	4764 436864	48670	99335	200822	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	10787 1132196	21592 1625332	189226	379757	719342	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	5347 584967	10992 876579	103707	199490	376786	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	27099 3349616	57589 4711177	544587	1094286	2169342	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	8865 1038523	18094 1552764	177768	351575	684438	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	6754 758227	11849 957680	119809	235239	483501	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	7422 782592	13421 970142	125069	247201	501017	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	22890 2798059	42636 3614422	467380	849081	1834190	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	10413 1010844	17427 1285631	172585	320453	659738	0.500 60.0	1.00 80.0	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-337766/13	U1900794.d
Level 2	STD8260 240-337766/12	U1900793.d
Level 3	STD8260 240-337766/11	U1900792.d
Level 4	ICIS 240-337766/10	U1900791.d
Level 5	STD8260 240-337766/9	U1900790.d
Level 6	STD8260 240-337766/3	U1900784.d
Level 7	STD8260 240-337766/2	U1900783.d

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
n-Heptane	+++++	1.1						50				

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: bfb037.d BFB Injection Date: 07/25/2018

Instrument ID: A3UX19 BFB Injection Time: 11:28

Analysis Batch No.: 337917

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	52.5	
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	1.1	(1.3) 1
174	50.0 - 120.00 % of mass 95	82.7	
175	5.0 - 9.0 % of mass 174	6.4	(7.8) 1
176	95.0 - 101.0 % of mass 174	80.3	(97.1) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-337917/8	U1900802.d	07/25/2018	13:24
	STDA9 240-337917/9	U1900803.d	07/25/2018	13:46
	STDA9 240-337917/10	U1900804.d	07/25/2018	14:08
	STDA9 240-337917/11	U1900805.d	07/25/2018	14:30
	STDA9 240-337917/12	U1900806.d	07/25/2018	14:52
	STDA9 240-337917/13	U1900807.d	07/25/2018	15:15
	ICV 240-337917/14	U1900808.d	07/25/2018	15:37

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337917

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2018 13:24 Calibration End Date: 07/25/2018 15:15 Calibration ID: 46243

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-337917/13	U1900807.d
Level 2	STDA9 240-337917/12	U1900806.d
Level 3	STDA9 240-337917/11	U1900805.d
Level 4	STDA9 240-337917/10	U1900804.d
Level 5	STDA9 240-337917/9	U1900803.d
Level 6	STDA9 240-337917/8	U1900802.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Acetonitrile	0.0267 0.0420	0.0243	0.0339	0.0383	0.0393	Lin1	-0.123	0.0406				15.8			0.9970		0.9900
Diisopropyl ether	0.2480 0.2295	0.2266	0.2186	0.2314	0.2335	Ave		0.2313				4.2		20.0			
2-Chloro-1,3-butadiene	0.4103 0.4183	0.3468	0.3861	0.4073	0.4185	Ave		0.3979				7.0		20.0			
Ethyl-t-butyl ether (ETBE)	0.6986 0.7570	0.7116	0.6979	0.7473	0.7423	Ave		0.7258				3.6		20.0			
Ethyl acetate	0.3112 0.3333	0.2920	0.2787	0.2931	0.2963	Ave		0.3007				6.3		20.0			
Propionitrile	0.0310 0.0489	0.0345	0.0381	0.0469	0.0451	Ave		0.0408				17.8		20.0			
Methacrylonitrile	0.1725 0.1953	0.1825	0.1747	0.1831	0.1889	Ave		0.1828				4.7		20.0			
Tert-amyl-methyl ether (TAME)	0.7358 0.8075	0.7777	0.7365	0.7842	0.7786	Ave		0.7700				3.7		20.0			
n-Butanol	0.0093 0.0103	0.0088	0.0085	0.0096	0.0096	Ave		0.0094				7.2		20.0			
Ethyl acrylate	0.3503 0.4100	0.3368	0.3674	0.3811	0.3761	Ave		0.3703				6.9		20.0			
Methyl methacrylate	0.2597 0.2591	0.2305	0.2383	0.2454	0.2423	Ave		0.2459				4.7		20.0			
2-Nitropropane	0.0701 0.0817	0.0670	0.0681	0.0750	0.0735	Ave		0.0726				7.5		20.0			
n-Butyl acetate	0.5119 0.5820	0.5042	0.5279	0.5447	0.5478	Ave		0.5364				5.3		20.0			
1-Chlorohexane	0.5172 0.4745	0.4432	0.4302	0.4451	0.4558	Ave		0.4610				6.8		20.0			
Cyclohexanone	0.0133 0.0157	0.0130	0.0126	0.0136	0.0138	Ave		0.0137				7.9		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337917

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2018 13:24 Calibration End Date: 07/25/2018 15:15 Calibration ID: 46243

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Pentachloroethane	0.3347 0.3690	0.3068	0.3632	0.3574	0.3461	Ave		0.3462				6.6		20.0			
1,2,3-Trimethylbenzene	2.1501 2.3751	2.2616	2.2092	2.3745	2.2840	Ave		2.2757				3.9		20.0			
Benzyl chloride	1.0405 1.5547	1.1450	1.1839	1.3693	1.4244	Ave		1.2863				15.1		20.0			
1,3,5-Trichlorobenzene	1.0658 1.0430	1.1076	0.9448	1.0009	0.9668	Ave		1.0215				6.1		20.0			
2-Methylnaphthalene	1.2994 1.8015	1.3689	1.2543	1.3185	1.5534	Ave		1.4327				14.6		20.0			
1-Chloro-1-fluoroethane TIC	0.2622 0.2664	0.2640	0.2502	0.2645	0.2646	Ave		0.2620				2.3		20.0			

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337917

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2018 13:24 Calibration End Date: 07/25/2018 15:15 Calibration ID: 46243

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-337917/13	U1900807.d
Level 2	STDA9 240-337917/12	U1900806.d
Level 3	STDA9 240-337917/11	U1900805.d
Level 4	STDA9 240-337917/10	U1900804.d
Level 5	STDA9 240-337917/9	U1900803.d
Level 6	STDA9 240-337917/8	U1900802.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acetonitrile	FB	Lin1	6053 1541995	10939	154933	344974	710013	5.00 800	10.0	100	200	400
Diisopropyl ether	FB	Ave	5629 842560	10198	100050	208654	422081	0.500 80.0	1.00	10.0	20.0	40.0
2-Chloro-1,3-butadiene	FB	Ave	9314 1535298	15609	176705	367286	756317	0.500 80.0	1.00	10.0	20.0	40.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	15860 2778668	32026	319412	673922	1341567	0.500 80.0	1.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	14128 2446844	26280	255115	528543	1070993	1.00 160	2.00	20.0	40.0	80.0
Propionitrile	FB	Ave	7042 1793207	15532	174314	423266	816037	5.00 800	10.0	100	200	400
Methacrylonitrile	FB	Ave	39164 7168171	82133	799457	1651014	3414371	5.00 800	10.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	16704 2963984	35001	337094	707156	1407333	0.500 80.0	1.00	10.0	20.0	40.0
n-Butanol	FB	Ave	5296 949589	9875	96861	216043	435974	12.5 2000	25.0	250	500	1000
Ethyl acrylate	FB	Ave	7952 1504928	15158	168159	343646	679802	0.500 80.0	1.00	10.0	20.0	40.0
Methyl methacrylate	FB	Ave	11793 1902368	20747	218113	442524	875995	1.00 160	2.00	20.0	40.0	80.0
2-Nitropropane	FB	Ave	3185 599949	6028	62364	135288	265523	1.00 160	2.00	20.0	40.0	80.0
n-Butyl acetate	CBNZ d5	Ave	9641 1740666	17906	199107	397090	794623	0.500 80.0	1.00	10.0	20.0	40.0
1-Chlorohexane	CBNZ d5	Ave	9741 1419019	15739	162266	324476	661168	0.500 80.0	1.00	10.0	20.0	40.0
Cyclohexanone	CBNZ d5	Ave	2498 468992	4617	47625	99504	200187	5.00 800	10.0	100	200	400
Pentachloroethane	DCBd 4	Ave	7164 1229564	12769	154980	304359	585743	1.00 160	2.00	20.0	40.0	80.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337917

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2018 13:24 Calibration End Date: 07/25/2018 15:15 Calibration ID: 46243

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCBd 4	Ave	23009 3957298	47067	471355	1010948	1932917	0.500 80.0	1.00	10.0	20.0	40.0
Benzyl chloride	DCBd 4	Ave	11135 2590360	23829	252607	582984	1205410	0.500 80.0	1.00	10.0	20.0	40.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	11406 1737829	23051	201583	426143	818176	0.500 80.0	1.00	10.0	20.0	40.0
2-Methylnaphthalene	DCBd 4	Ave	27811 6003075	56979	535247	1122673	2629143	1.00 160	2.00	20.0	40.0	80.0
1-Chloro-1-fluoroethane TIC	FB	Ave	5953 977727	11883	114539	238507	478166	0.500 80.0	1.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 337917

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/25/2018 13:24 Calibration End Date: 07/25/2018 15:15 Calibration ID: 46243

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-337917/13	U1900807.d
Level 2	STDA9 240-337917/12	U1900806.d
Level 3	STDA9 240-337917/11	U1900805.d
Level 4	STDA9 240-337917/10	U1900804.d
Level 5	STDA9 240-337917/9	U1900803.d
Level 6	STDA9 240-337917/8	U1900802.d

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Acetonitrile	26.1						50					

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-337917/14 Calibration Date: 07/25/2018 15:37

Instrument ID: A3UX19 Calib Start Date: 07/24/2018 17:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2018 20:04

Lab File ID: U1900808.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2589	0.2758		0.0213	0.0200	6.5	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2744	0.2888		0.0211	0.0200	5.3	30.0
Toluene-d8 (Surr)	Ave	1.204	1.258		0.0209	0.0200	4.5	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4627	0.4749		0.0205	0.0200	2.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-337917/14 Calibration Date: 07/25/2018 15:37

Instrument ID: A3UX19 Calib Start Date: 07/25/2018 13:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2018 15:15

Lab File ID: U1900808.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Lin1		0.0327		0.164	0.200	-17.8	30.0
Diisopropyl ether	Ave	0.2313	0.2381		0.0206	0.0200	3.0	30.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.4016		0.0202	0.0200	0.9	30.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.7451		0.0205	0.0200	2.7	30.0
Ethyl acetate	Ave	0.3007	0.2753		0.0366	0.0400	-8.5	50.0
Propionitrile	Ave	0.0408	0.0395		0.194	0.200	-3.0	30.0
Methacrylonitrile	Ave	0.1828	0.1926		0.211	0.200	5.3	30.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.7828		0.0203	0.0200	1.7	30.0
n-Butanol	Ave	0.0094	0.0086		0.457	0.500	-8.6	30.0
Ethyl acrylate	Ave	0.3703	0.3736		0.0202	0.0200	0.9	30.0
Methyl methacrylate	Ave	0.2459	0.2495		0.0406	0.0400	1.5	30.0
2-Nitropropane	Ave	0.0726	0.0727		0.0400	0.0400	0.1	30.0
n-Butyl acetate	Ave	0.5364	0.5464		0.0204	0.0200	1.9	30.0
1-Chlorohexane	Ave	0.4610	0.4451		0.0193	0.0200	-3.4	30.0
Cyclohexanone	Ave	0.0137	0.0138		0.202	0.200	1.0	30.0
Pentachloroethane	Ave	0.3462	0.3376		0.0390	0.0400	-2.5	30.0
1,2,3-Trimethylbenzene	Ave	2.276	2.407		0.0212	0.0200	5.8	30.0
Benzyl chloride	Ave	1.286	1.208		0.0188	0.0200	-6.1	30.0
1,3,5-Trichlorobenzene	Ave	1.021	1.003		0.0196	0.0200	-1.8	30.0
2-Methylnaphthalene	Ave	1.433	1.388		0.0388	0.0400	-3.1	30.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: bfb058.d BFB Injection Date: 08/27/2018

Instrument ID: A3UX19 BFB Injection Time: 16:23

Analysis Batch No.: 342719

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.5	
75	30.0 - 60.0 % of mass 95	49.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.6	(0.6) 1
174	50.0 - 120.00 % of mass 95	94.9	
175	5.0 - 9.0 % of mass 174	7.3	(7.7) 1
176	95.0 - 101.0 % of mass 174	92.7	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-342719/7	U1901323.d	08/27/2018	17:09
	STD8260 240-342719/8	U1901324.d	08/27/2018	17:31
	STD8260 240-342719/9	U1901325.d	08/27/2018	17:53
	ICIS 240-342719/10	U1901326.d	08/27/2018	18:16
	STD8260 240-342719/11	U1901327.d	08/27/2018	18:38
	STD8260 240-342719/12	U1901328.d	08/27/2018	19:01
	STD8260 240-342719/13	U1901329.d	08/27/2018	19:23
	ICV 240-342719/14	U1901330.d	08/27/2018	19:45

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342719/13	U1901329.d
Level 2	STD8260 240-342719/12	U1901328.d
Level 3	STD8260 240-342719/11	U1901327.d
Level 4	ICIS 240-342719/10	U1901326.d
Level 5	STD8260 240-342719/9	U1901325.d
Level 6	STD8260 240-342719/8	U1901324.d
Level 7	STD8260 240-342719/7	U1901323.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3252 0.4073	0.3858 0.4041	0.3902	0.3772	0.4052	Ave		0.3850			0.1000	7.5		20.0			
Chloromethane	0.3476 0.2860	0.2731 0.2757	0.2817	0.2748	0.2796	Ave		0.2883			0.1000	9.2		20.0			
Butadiene	0.2863 0.2923	0.2971 0.2827	0.2967	0.2831	0.2826	Ave		0.2887				2.3		20.0			
Vinyl chloride	0.2799 0.3039	0.3000 0.2955	0.3102	0.2950	0.3013	Ave		0.2980			0.1000	3.2		20.0			
Bromomethane	0.2530 0.2308	0.2391 0.2251	0.2340	0.2259	0.2264	Ave		0.2335			0.0500	4.3		20.0			
Chloroethane	0.2052 0.1842	0.1766 0.1812	0.1882	0.1779	0.1807	Ave		0.1848			0.0500	5.3		20.0			
Dichlorofluoromethane	0.4944 0.4514	0.4567 0.4411	0.4677	0.4468	0.4490	Ave		0.4581				3.9		20.0			
Trichlorofluoromethane	0.4941 0.5030	0.4893 0.4931	0.5122	0.4967	0.5003	Ave		0.4984			0.1000	1.5		20.0			
Ethyl ether	0.1731 0.1798	0.1898 0.1760	0.1849	0.1771	0.1791	Ave		0.1800				3.1		20.0			
Acrolein	0.0495 0.0430	0.0446 0.0441	0.0420	0.0454	0.0427	Ave		0.0445				5.6		20.0			
1,1-Dichloroethene	0.3476 0.3661	0.3473 0.3597	0.3727	0.3582	0.3610	Ave		0.3589			0.1000	2.6		20.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2493 0.2658	0.2366 0.2616	0.2651	0.2563	0.2622	Ave		0.2567			0.0500	4.1		20.0			
Acetone	+++++ 0.0747	0.0941 0.0735	0.0766	0.0752	0.0764	Ave		0.0784			0.0100	9.9		20.0			
Iodomethane	0.4872 0.4597	0.4730 0.4538	0.4730	0.4575	0.4539	Ave		0.4655				2.7		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.8746 0.7168	0.8257 0.7023	0.7362	0.7031	0.7015	Ave		0.7515			0.1000	9.3		20.0			
3-Chloro-1-propene	0.3735 0.3489	0.3837 0.3396	0.3586	0.3361	0.3385	Ave		0.3541				5.3		20.0			
Methyl acetate	0.2638 0.2201	0.2366 0.2157	0.2398	0.2267	0.2267	Ave		0.2328			0.1000	6.9		20.0			
Methylene Chloride	+++++ 0.2751	0.3184 0.2694	0.2925	0.2792	0.2733	Ave		0.2846			0.1000	6.5		20.0			
tert-Butyl alcohol	0.0302 0.0245	0.0277 0.0251	0.0284	0.0260	0.0277	Ave		0.0271				7.4		20.0			
Acrylonitrile	0.1006 0.0983	0.1046 0.0951	0.1079	0.0977	0.0997	Ave		0.1006				4.3		20.0			
trans-1,2-Dichloroethene	0.3568 0.3338	0.3540 0.3216	0.3508	0.3269	0.3267	Ave		0.3387			0.1000	4.4		20.0			
Methyl tert-butyl ether	0.6459 0.7174	0.6970 0.7172	0.7178	0.6715	0.6899	Ave		0.6938			0.1000	3.9		20.0			
Hexane	0.3287 0.3643	0.3216 0.3693	0.3652	0.3577	0.3600	Ave		0.3524				5.4		20.0			
1,1-Dichloroethane	0.3877 0.4112	0.4141 0.3990	0.4182	0.3989	0.4043	Ave		0.4048			0.2000	2.6		20.0			
Vinyl acetate	0.4652 0.4557	0.4582 0.4625	0.4853	0.4584	0.4619	Ave		0.4639				2.1		20.0			
cis-1,2-Dichloroethene	0.3057 0.2869	0.2992 0.2782	0.2948	0.2801	0.2786	Ave		0.2891			0.1000	3.8		20.0			
2,2-Dichloropropane	0.2469 0.2502	0.2497 0.2458	0.2443	0.2181	0.2515	Ave		0.2438				4.8		20.0			
2-Butanone	0.0487 0.0444	0.0481 0.0466	0.0506	0.0457	0.0465	Ave		0.0472			0.0100	4.3		20.0			
Bromochloromethane	0.2347 0.1831	0.2161 0.1713	0.1973	0.1804	0.1790	Ave		0.1945				11.9		20.0			
Tetrahydrofuran	+++++ 0.0978	0.2111 0.0981	0.1202	0.1027	0.1037	Lin1	0.2460	0.0976				7.4			0.9990		0.9900
Chloroform	0.4336 0.4423	0.4430 0.4326	0.4702	0.4398	0.4415	Ave		0.4433			0.2000	2.8		20.0			
1,1,1-Trichloroethane	0.3739 0.4296	0.4106 0.4262	0.4442	0.4096	0.4275	Ave		0.4174			0.1000	5.4		20.0			
Cyclohexane	0.3499 0.3999	0.3515 0.3986	0.3944	0.3825	0.3967	Ave		0.3819			0.1000	5.8		20.0			
1,1-Dichloropropene	0.3411 0.3565	0.3509 0.3499	0.3664	0.3469	0.3516	Ave		0.3519				2.3		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.3818 0.4136	0.3781 0.4121	0.4219	0.3956	0.4130	Ave		0.4023			0.1000	4.3		20.0			
Isobutyl alcohol	0.0122 0.0101	0.0118 0.0103	0.0107	0.0108	0.0111	Ave		0.0110				7.0		20.0			
Benzene	0.9270 0.9480	0.9546 0.9366	1.0106	0.9431	0.9423	Ave		0.9518			0.5000	2.9		20.0			
1,2-Dichloroethane	0.3794 0.3459	0.3845 0.3369	0.3743	0.3513	0.3479	Ave		0.3600			0.1000	5.2		20.0			
n-Heptane	+++++ 0.1978	0.8214 0.1912	0.2589	0.2169	0.2053	Lin1	0.6437	0.1861				3.4			1.0000		0.9900
Trichloroethene	0.3334 0.3137	0.3081 0.3106	0.3277	0.3076	0.3109	Ave		0.3160			0.1500	3.3		20.0			
Methylcyclohexane	0.4282 0.4825	0.4267 0.4698	0.4724	0.4580	0.4751	Ave		0.4590			0.1000	5.0		20.0			
1,2-Dichloropropane	0.2171 0.2187	0.2141 0.2164	0.2362	0.2209	0.2218	Ave		0.2208			0.1000	3.3		20.0			
Dibromomethane	0.2410 0.2204	0.2408 0.2155	0.2336	0.2191	0.2191	Ave		0.2271				4.9		20.0			
1,4-Dioxane	+++++ 0.0025	0.0016 0.0027	0.0021	0.0026	0.0028	Ave		0.0024				17.9		20.0			
Bromodichloromethane	0.3399 0.3440	0.3630 0.3379	0.3620	0.3462	0.3426	Ave		0.3479			0.1500	3.0		20.0			
2-Chloroethyl vinyl ether	0.1593 0.1741	0.1654 0.1828	0.1943	0.1818	0.1815	Ave		0.1770				6.6		20.0			
cis-1,3-Dichloropropene	0.3743 0.3841	0.3867 0.3870	0.4032	0.3827	0.3872	Ave		0.3865			0.1500	2.2		20.0			
4-Methyl-2-pentanone	0.3150 0.3064	0.3110 0.3144	0.3487	0.3229	0.3240	Ave		0.3203			0.0500	4.4		20.0			
Toluene	1.3762 1.3312	1.3706 1.3223	1.4018	1.3282	1.3309	Ave		1.3516			0.4000	2.3		20.0			
trans-1,3-Dichloropropene	0.4999 0.4712	0.5033 0.4805	0.4835	0.4641	0.4704	Ave		0.4818			0.1000	3.1		20.0			
Ethyl methacrylate	0.3824 0.4408	0.4001 0.4600	0.4577	0.4462	0.4540	Ave		0.4344				7.1		20.0			
1,1,2-Trichloroethane	0.2808 0.2823	0.2821 0.2821	0.2973	0.2798	0.2847	Ave		0.2842			0.1000	2.1		20.0			
Tetrachloroethene	0.4234 0.4375	0.4194 0.4317	0.4508	0.4248	0.4314	Ave		0.4313			0.1500	2.4		20.0			
1,3-Dichloropropane	0.4988 0.4724	0.4733 0.4772	0.5009	0.4686	0.4705	Ave		0.4802				2.8		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.2781 0.3092	0.3020 0.3219	0.3438	0.3247	0.3245	Ave		0.3149			0.0500	6.6		20.0			
Dibromochloromethane	0.3308 0.3663	0.3497 0.3646	0.3736	0.3604	0.3630	Ave		0.3583				3.9		20.0			
1,2-Dibromoethane	0.3770 0.3214	0.3321 0.3219	0.3422	0.3286	0.3194	Ave		0.3346				6.1		20.0			
Chlorobenzene	0.9370 0.9055	0.9832 0.8914	0.9544	0.9002	0.9056	Ave		0.9253			0.3000	3.7		20.0			
1,1,1,2-Tetrachloroethane	0.3225 0.3380	0.3313 0.3315	0.3490	0.3282	0.3347	Ave		0.3336				2.5		20.0			
Ethylbenzene	0.4566 0.4899	0.4640 0.4838	0.5159	0.4863	0.4886	Ave		0.4836				4.0		20.0			
m-Xylene & p-Xylene	0.5709 0.5980	0.5535 0.5943	0.6142	0.5959	0.5965	Ave		0.5890				3.4		20.0			
o-Xylene	0.5188 0.5706	0.5578 0.5579	0.5806	0.5638	0.5683	Ave		0.5597				3.5		20.0			
Styrene	0.8915 0.9829	0.9056 0.9730	1.0088	0.9699	0.9794	Ave		0.9588			0.3000	4.5		20.0			
Bromoform	0.2892 0.2933	0.2907 0.2979	0.3020	0.2847	0.2951	Ave		0.2933			0.1000	2.0		20.0			
Isopropylbenzene	1.3694 1.5447	1.4922 1.4942	1.5808	1.5060	1.5314	Ave		1.5027			0.1000	4.4		20.0			
1,1,2,2-Tetrachloroethane	0.7123 0.7674	0.7872 0.7661	0.8261	0.7624	0.7730	Ave		0.7706			0.3000	4.4		20.0			
Bromobenzene	0.7562 0.7639	0.7920 0.7473	0.8125	0.7532	0.7575	Ave		0.7690				3.1		20.0			
1,2,3-Trichloropropane	0.2805 0.2866	0.2903 0.2882	0.3178	0.2884	0.2929	Ave		0.2921				4.1		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2667	0.2763 0.2751	0.2902	0.2665	0.2675	Ave		0.2737				3.3		20.0			
n-Propylbenzene	0.7009 0.7973	0.7492 0.7772	0.8251	0.7710	0.7894	Ave		0.7729				5.1		20.0			
2-Chlorotoluene	0.6131 0.6732	0.6212 0.6509	0.7079	0.6539	0.6587	Ave		0.6541				4.9		20.0			
1,3,5-Trimethylbenzene	2.1099 2.2883	2.1099 2.2183	2.3988	2.1936	2.2594	Ave		2.2255				4.6		20.0			
4-Chlorotoluene	0.7307 0.7048	0.6944 0.6840	0.7470	0.7010	0.6888	Ave		0.7072				3.3		20.0			
tert-Butylbenzene	1.9093 2.2037	2.0260 2.1009	2.2785	2.0983	2.1715	Ave		2.1126				5.7		20.0			

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

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.0996 2.3002	2.2590 2.2368	2.3762	2.2406	2.2826	Ave		2.2564				3.7		20.0			
sec-Butylbenzene	2.5921 3.0046	2.6994 2.8685	2.9965	2.8235	2.9285	Ave		2.8447				5.4		20.0			
1,3-Dichlorobenzene	1.4791 1.3933	1.5035 1.3394	1.4385	1.3676	1.3647	Ave		1.4123			0.6000	4.4		20.0			
p-Isopropyltoluene	2.2955 2.5970	2.3910 2.5362	2.6099	2.4625	2.5496	Ave		2.4917				4.6		20.0			
1,4-Dichlorobenzene	1.6054 1.4113	1.5675 1.3669	1.4816	1.3825	1.3984	Ave		1.4591			0.5000	6.5		20.0			
n-Butylbenzene	1.8944 2.1259	2.0232 2.0712	2.1091	2.0276	2.0953	Ave		2.0495				3.8		20.0			
1,2-Dichlorobenzene	1.3437 1.2534	1.3687 1.2318	1.3105	1.2348	1.2330	Ave		1.2823			0.4000	4.5		20.0			
1,2-Dibromo-3-Chloropropane	0.2630 0.2491	0.2219 0.2547	0.2430	0.2371	0.2465	Ave		0.2450			0.0500	5.4		20.0			
1,2,4-Trichlorobenzene	0.9409 0.8412	0.9494 0.8737	0.8099	0.7792	0.7909	Ave		0.8550			0.2000	8.1		20.0			
Hexachlorobutadiene	0.4751 0.4459	0.4859 0.4196	0.4201	0.4076	0.4202	Ave		0.4392				7.0		20.0			
Naphthalene	+++++ 2.4081	2.5248 2.5673	2.2519	2.1428	2.2829	Ave		2.3630				7.0		20.0			
1,2,3-Trichlorobenzene	0.7893 0.7724	0.8277 0.8517	0.7383	0.6846	0.7103	Ave		0.7677				7.9		20.0			
Dibromofluoromethane (Surr)	0.2950 0.2630	0.2820 0.2531	0.2707	0.2587	0.2619	Ave		0.2692				5.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3515 0.2903	0.3408 0.2779	0.3137	0.2940	0.2963	Ave		0.3092				8.9		20.0			
Toluene-d8 (Surr)	1.2799 1.1805	1.2018 1.1653	1.2236	1.1594	1.1844	Ave		1.1993				3.5		20.0			
4-Bromofluorobenzene (Surr)	0.5295 0.4325	0.4716 0.4172	0.4467	0.4309	0.4307	Ave		0.4513				8.5		20.0			

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342719/13	U1901329.d
Level 2	STD8260 240-342719/12	U1901328.d
Level 3	STD8260 240-342719/11	U1901327.d
Level 4	ICIS 240-342719/10	U1901326.d
Level 5	STD8260 240-342719/9	U1901325.d
Level 6	STD8260 240-342719/8	U1901324.d
Level 7	STD8260 240-342719/7	U1901323.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	7625 1180992	18328 1552738	186223	366772	792590	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chloromethane	FB	Ave	8152 829233	12972 1059365	134420	267203	546909	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Butadiene	FB	Ave	6713 847603	14115 1086231	141609	275330	552757	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Vinyl chloride	FB	Ave	6564 881108	14250 1135494	148037	286894	589426	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromomethane	FB	Ave	5934 669257	11360 864872	111689	219651	442826	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Chloroethane	FB	Ave	4812 533953	8387 696179	89838	172968	353502	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	11593 1308784	21694 1694878	223205	434465	878380	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	11587 1458414	23241 1894654	244417	483006	978643	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl ether	FB	Ave	4060 521372	9015 676475	88252	172224	350377	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Acrolein	FB	Ave	5804 622965	10600 846753	100203	220720	417769	2.50 300	5.00 400	50.0	100	200
1,1-Dichloroethene	FB	Ave	8152 1061526	16498 1382045	177882	348307	706289	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	5847 770733	11240 1005400	126531	249289	512861	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Acetone	FB	Ave	+++++ 433055	8941 564923	73077	146204	298968	+++++ 120	2.00 160	20.0	40.0	80.0
Iodomethane	FB	Ave	11424 1332936	22471 1743886	225726	444884	888035	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Carbon disulfide	FB	Ave	20511 2078244	39223 2698750	351356	683722	1372316	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	8759 1011692	18227 1304832	171118	326833	662138	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl acetate	FB	Ave	12374 1276471	22480 1658043	228841	440913	886871	1.00 120	2.00 160	20.0	40.0	80.0
Methylene Chloride	FB	Ave	+++++ 797526	15126 1035294	139613	271471	534613	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
tert-Butyl alcohol	FB	Ave	7089 709594	13140 963916	135517	252801	542388	5.00 600	10.0 800	100	200	400
Acrylonitrile	FB	Ave	23600 2849701	49680 3654042	514757	950386	1951040	5.00 600	10.0 800	100	200	400
trans-1,2-Dichloroethene	FB	Ave	8368 967924	16818 1235776	167419	317885	639131	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	15146 2079947	33109 2755910	342568	653045	1349603	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Hexane	FB	Ave	7709 1056328	15276 1419117	174299	347875	704185	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	9092 1192355	19673 1533220	199597	387941	790957	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Vinyl acetate	FB	Ave	10910 1321142	21765 1777280	231586	445770	903595	0.500 60.0	1.00 80.0	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	7168 831715	14212 1069027	140685	272438	545012	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	5791 725393	11860 944363	116583	212094	491954	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Butanone	FB	Ave	2283 257675	4567 358198	48290	88909	181887	1.00 120	2.00 160	20.0	40.0	80.0
Bromochloromethane	FB	Ave	5503 530825	10266 658069	94139	175479	350082	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Tetrahydrofuran	FB	Lin1	+++++ 566965	20056 753652	114720	199816	405539	+++++ 120	2.00 160	20.0	40.0	80.0
Chloroform	FB	Ave	10169 1282514	21044 1662428	224371	427697	863672	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	8767 1245609	19503 1637723	211997	398309	836381	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Cyclohexane	FB	Ave	8206 1159393	16696 1531667	188221	372006	776128	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	7998 1033663	16667 1344377	174842	337392	687882	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	8954 1199313	17959 1583649	201366	384700	807965	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	7140 731439	14010 985172	127213	263438	540692	12.5 1500	25.0 2000	250	500	1000

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	21738 2748682	45349 3599104	482300	917150	1843426	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloroethane	FB	Ave	8896 1002994	18266 1294416	178638	341638	680627	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 573367	39021 734621	123554	210893	401639	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
Trichloroethene	FB	Ave	7819 909646	14636 1193487	156409	299123	608172	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	10042 1399000	20268 1805108	225444	445411	929492	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	5092 634222	10172 831616	112735	214790	433884	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dibromomethane	FB	Ave	5652 638964	11437 828119	111478	213090	428543	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	+++++ 147508	1560 204613	20257	50489	108387	+++++ 1200	20.0 1600	200	400	800
Bromodichloromethane	FB	Ave	7972 997303	17242 1298324	172767	336655	670319	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	7473 1009556	15714 1404589	185460	353595	710198	1.00 120	2.00 160	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	8778 1113655	18371 1486992	192411	372198	757475	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Methyl-2-pentanone	FB	Ave	14774 1776570	29549 2416341	332777	627983	1267570	1.00 120	2.00 160	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	25413 3039879	50838 4036837	544474	1040131	2085055	0.500 60.0	1.00 80.0	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	9232 1076004	18668 1466824	187797	363416	737016	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	7062 1006534	14839 1404401	177753	349427	711262	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	5186 644677	10462 861140	115489	219105	445968	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	7818 999011	15556 1317893	175104	332664	675866	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	9211 1078694	17554 1456758	194537	366944	737142	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	10272 1411899	22402 1965782	267096	508487	1016835	1.00 120	2.00 160	20.0	40.0	80.0
Dibromochloromethane	CBNZ d5	Ave	6108 836499	12969 1113195	145120	282195	568645	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dibromoethane	CBNZ d5	Ave	6962 733806	12317 982631	132926	257341	500324	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	17303 2067581	36469 2721351	370702	704913	1418747	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	5956 771705	12290 1012040	135561	257026	524311	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	8431 1118678	17209 1476959	200390	380861	765441	0.500 60.0	1.00 80.0	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	10542 1365436	20530 1814431	238543	466651	934583	0.500 60.0	1.00 80.0	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	9580 1302937	20689 1703380	225509	441487	890297	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	16463 2244503	33591 2970527	391834	759556	1534422	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	5340 669771	10783 909465	117306	222929	462320	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	25288 3527221	55346 4561888	613985	1179370	2399226	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	7218 951258	16261 1271933	172140	328526	660294	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	7663 946835	16361 1240722	169316	324573	647055	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	2842 355186	5997 478494	66218	124262	250203	0.500 60.0	1.00 80.0	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 330637	5707 456736	60466	114842	228469	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
n-Propylbenzene	DCBd 4	Ave	7103 988262	15476 1290307	171938	332244	674293	0.500 60.0	1.00 80.0	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	6213 834423	12831 1080636	147510	281753	562614	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	21381 2836427	43584 3682951	499875	945225	1929863	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	7405 873575	14345 1135643	155656	302046	588358	0.500 60.0	1.00 80.0	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	19348 2731529	41850 3487952	474813	904165	1854784	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	21277 2851175	46663 3713592	495166	965487	1949684	0.500 60.0	1.00 80.0	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	26267 3724288	55760 4762339	624437	1216655	2501406	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	14989 1726981	31057 2223773	299776	589299	1165661	0.500 60.0	1.00 80.0	10.0	20.0	40.0
p-Isopropyltoluene	DCBd 4	Ave	23262 3219084	49391 4210777	543873	1061108	2177763	0.500 60.0	1.00 80.0	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	16269 1749380	32379 2269476	308743	595729	1194426	0.500 60.0	1.00 80.0	10.0	20.0	40.0
n-Butylbenzene	DCBd 4	Ave	19197 2635155	41792 3438646	439518	873706	1789693	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	13617 1553579	28272 2045057	273092	532075	1053180	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	2665 308798	4583 422865	50642	102189	210526	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	9535 1042664	19612 1450610	168774	335760	675526	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	4814 552719	10037 696652	87534	175651	358938	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	+++++ 2984863	52154 4262332	469280	923339	1949946	+++++ 60.0	1.00 80.0	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7998 957428	17097 1414051	153843	295011	606712	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	6919 762443	13395 972724	129168	251584	512374	0.500 60.0	1.00 80.0	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	8242 841615	16187 1067780	149716	285917	579615	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	23636 2695636	44577 3557725	475254	907923	1855495	0.500 60.0	1.00 80.0	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	9778 987516	17494 1273707	173480	337411	674745	0.500 60.0	1.00 80.0	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-342719/13	U1901329.d
Level 2	STD8260 240-342719/12	U1901328.d
Level 3	STD8260 240-342719/11	U1901327.d
Level 4	ICIS 240-342719/10	U1901326.d
Level 5	STD8260 240-342719/9	U1901325.d
Level 6	STD8260 240-342719/8	U1901324.d
Level 7	STD8260 240-342719/7	U1901323.d

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Tetrahydrofuran	+++++	-9.7						50				
n-Heptane	+++++	-4.5						50				

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-342719/14 Calibration Date: 08/27/2018 19:45

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1901330.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	0.3850	0.2913	0.1000	0.0151	0.0200	-24.3	30.0
Chloromethane	Ave	0.2883	0.2492	0.1000	0.0173	0.0200	-13.6	30.0
Butadiene	Ave	0.2887	0.2477		0.0172	0.0200	-14.2	30.0
Vinyl chloride	Ave	0.2980	0.2874	0.1000	0.0193	0.0200	-3.5	30.0
Bromomethane	Ave	0.2335	0.2187	0.0500	0.0187	0.0200	-6.3	30.0
Chloroethane	Ave	0.1848	0.1799	0.0500	0.0195	0.0200	-2.7	30.0
Dichlorofluoromethane	Ave	0.4581	0.4762		0.0208	0.0200	3.9	30.0
Trichlorofluoromethane	Ave	0.4984	0.5062	0.1000	0.0203	0.0200	1.6	30.0
Ethyl ether	Ave	0.1800	0.1933		0.0215	0.0200	7.4	30.0
Acrolein	Ave	0.0445	0.0361		0.0812	0.100	-18.8	50.0
1,1-Dichloroethene	Ave	0.3589	0.3889	0.1000	0.0217	0.0200	8.3	30.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2567	0.2852	0.0500	0.0222	0.0200	11.1	30.0
Acetone	Ave	0.0784	0.0730	0.0100	0.0372	0.0400	-6.9	50.0
Iodomethane	Ave	0.4655	0.4827		0.0207	0.0200	3.7	30.0
Carbon disulfide	Ave	0.7515	0.7522	0.1000	0.0200	0.0200	0.0	30.0
3-Chloro-1-propene	Ave	0.3541	0.3611		0.0204	0.0200	2.0	30.0
Methyl acetate	Ave	0.2328	0.2202	0.1000	0.0378	0.0400	-5.4	30.0
Methylene Chloride	Ave	0.2846	0.2847	0.1000	0.0200	0.0200	0.0	50.0
tert-Butyl alcohol	Ave	0.0271	0.0283		0.209	0.200	4.3	50.0
Acrylonitrile	Ave	0.1006	0.1020		0.203	0.200	1.4	30.0
Methyl tert-butyl ether	Ave	0.6938	0.7063	0.1000	0.0204	0.0200	1.8	30.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3554	0.1000	0.0210	0.0200	4.9	30.0
Hexane	Ave	0.3524	0.3872		0.0220	0.0200	9.9	30.0
1,1-Dichloroethane	Ave	0.4048	0.4171	0.2000	0.0206	0.0200	3.0	30.0
Vinyl acetate	Ave	0.4639	0.5080		0.0219	0.0200	9.5	50.0
2,2-Dichloropropane	Ave	0.2438	0.2691		0.0221	0.0200	10.4	30.0
2-Butanone	Ave	0.0472	0.0464	0.0100	0.0393	0.0400	-1.8	30.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2867	0.1000	0.0198	0.0200	-0.8	30.0
Bromochloromethane	Ave	0.1945	0.1891		0.0194	0.0200	-2.8	30.0
Tetrahydrofuran	Lin1		0.1082		0.0418	0.0400	4.6	30.0
Chloroform	Ave	0.4433	0.4563	0.2000	0.0206	0.0200	2.9	30.0
1,1,1-Trichloroethane	Ave	0.4174	0.4498	0.1000	0.0216	0.0200	7.8	30.0
Cyclohexane	Ave	0.3819	0.4119	0.1000	0.0216	0.0200	7.8	30.0
1,1-Dichloropropene	Ave	0.3519	0.3667		0.0208	0.0200	4.2	30.0
Carbon tetrachloride	Ave	0.4023	0.4240	0.1000	0.0211	0.0200	5.4	30.0
Isobutyl alcohol	Ave	0.0110	0.0112		0.508	0.500	1.6	30.0
1,2-Dichloroethane	Ave	0.3600	0.3604	0.1000	0.0200	0.0200	0.1	30.0
Benzene	Ave	0.9518	0.9713	0.5000	0.0204	0.0200	2.1	30.0
n-Heptane	Lin1		0.2300		0.0213	0.0200	6.3	30.0
Trichloroethene	Ave	0.3160	0.3196	0.1500	0.0202	0.0200	1.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-342719/14 Calibration Date: 08/27/2018 19:45

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1901330.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4590	0.4761	0.1000	0.0207	0.0200	3.7	30.0
1,2-Dichloropropane	Ave	0.2208	0.2306	0.1000	0.0209	0.0200	4.5	30.0
Dibromomethane	Ave	0.2271	0.2193		0.0193	0.0200	-3.4	30.0
1,4-Dioxane	Ave	0.0024	0.0028		0.474	0.400	18.4	50.0
Bromodichloromethane	Ave	0.3479	0.3495	0.1500	0.0201	0.0200	0.4	30.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1822		0.0206	0.0200	2.9	30.0
cis-1,3-Dichloropropene	Ave	0.3865	0.4060	0.1500	0.0210	0.0200	5.1	30.0
4-Methyl-2-pentanone	Ave	0.3203	0.3230	0.0500	0.0403	0.0400	0.8	30.0
Toluene	Ave	1.352	1.362	0.4000	0.0201	0.0200	0.7	30.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4613	0.1000	0.0191	0.0200	-4.3	30.0
Ethyl methacrylate	Ave	0.4344	0.4432		0.0204	0.0200	2.0	30.0
1,1,2-Trichloroethane	Ave	0.2842	0.2905	0.1000	0.0204	0.0200	2.2	30.0
Tetrachloroethene	Ave	0.4313	0.4447	0.1500	0.0206	0.0200	3.1	30.0
1,3-Dichloropropane	Ave	0.4802	0.4738		0.0197	0.0200	-1.3	30.0
2-Hexanone	Ave	0.3149	0.3202	0.0500	0.0407	0.0400	1.7	30.0
Dibromochloromethane	Ave	0.3583	0.3632		0.0203	0.0200	1.3	30.0
1,2-Dibromoethane	Ave	0.3346	0.3230		0.0193	0.0200	-3.5	30.0
Chlorobenzene	Ave	0.9253	0.9231	0.3000	0.0200	0.0200	-0.2	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3465		0.0208	0.0200	3.9	30.0
Ethylbenzene	Ave	0.4836	0.4959		0.0205	0.0200	2.5	30.0
m-Xylene & p-Xylene	Ave	0.5890	0.6110		0.0207	0.0200	3.7	30.0
o-Xylene	Ave	0.5597	0.5768		0.0206	0.0200	3.1	30.0
Styrene	Ave	0.9588	0.9701	0.3000	0.0202	0.0200	1.2	30.0
Bromoform	Ave	0.2933	0.2923	0.1000	0.0199	0.0200	-0.3	30.0
Isopropylbenzene	Ave	1.503	1.583	0.1000	0.0211	0.0200	5.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.7768	0.3000	0.0202	0.0200	0.8	30.0
Bromobenzene	Ave	0.7690	0.7545		0.0196	0.0200	-1.9	30.0
1,2,3-Trichloropropane	Ave	0.2921	0.3010		0.0206	0.0200	3.0	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2785		0.0203	0.0200	1.7	30.0
n-Propylbenzene	Ave	0.7729	0.7998		0.0207	0.0200	3.5	30.0
2-Chlorotoluene	Ave	0.6541	0.6592		0.0202	0.0200	0.8	30.0
1,3,5-Trimethylbenzene	Ave	2.225	2.303		0.0207	0.0200	3.5	30.0
4-Chlorotoluene	Ave	0.7072	0.7078		0.0200	0.0200	0.0	30.0
tert-Butylbenzene	Ave	2.113	2.203		0.0209	0.0200	4.3	30.0
1,2,4-Trimethylbenzene	Ave	2.256	2.278		0.0202	0.0200	1.0	30.0
sec-Butylbenzene	Ave	2.845	3.009		0.0212	0.0200	5.8	30.0
1,3-Dichlorobenzene	Ave	1.412	1.370	0.6000	0.0194	0.0200	-3.0	30.0
p-Isopropyltoluene	Ave	2.492	2.628		0.0211	0.0200	5.5	30.0
1,4-Dichlorobenzene	Ave	1.459	1.395	0.5000	0.0191	0.0200	-4.4	30.0
n-Butylbenzene	Ave	2.050	2.114		0.0206	0.0200	3.1	30.0
1,2-Dichlorobenzene	Ave	1.282	1.257	0.4000	0.0196	0.0200	-2.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICV 240-342719/14 Calibration Date: 08/27/2018 19:45

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1901330.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2450	0.2412	0.0500	0.0197	0.0200	-1.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.8004	0.2000	0.0187	0.0200	-6.4	50.0
Hexachlorobutadiene	Ave	0.4392	0.4373		0.0199	0.0200	-0.4	30.0
Naphthalene	Ave	2.363	2.262		0.0191	0.0200	-4.3	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.7284		0.0190	0.0200	-5.1	30.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2770		0.0206	0.0200	2.9	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.3266		0.0211	0.0200	5.6	30.0
Toluene-d8 (Surr)	Ave	1.199	1.238		0.0206	0.0200	3.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4759		0.0211	0.0200	5.5	30.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: bfb321.d BFB Injection Date: 08/12/2019

Instrument ID: A3UX19 BFB Injection Time: 17:21

Analysis Batch No.: 395620

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.2	
75	30.0 - 60.0 % of mass 95	51.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.8	
175	5.0 - 9.0 % of mass 174	6.5	(7.8) 1
176	95.0 - 101.0 % of mass 174	80.1	(95.5) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-395620/3	U1909131.d	08/12/2019	17:52
	CCVIS 240-395620/4	U1909132.d	08/12/2019	18:14
	LCS 240-395620/5	U1909133.d	08/12/2019	18:37
	MB 240-395620/8	U1909136.d	08/12/2019	19:44
MSA-SW37A-080819	240-117170-1	U1909137.d	08/12/2019	20:07
MSA-SW37B-080819	240-117170-2	U1909138.d	08/12/2019	20:29
MSA-SW37C-080819	240-117170-3	U1909139.d	08/12/2019	20:51
MSA-SW37D-080819	240-117170-4	U1909140.d	08/12/2019	21:14
MSA-SW38A-080819	240-117170-5	U1909141.d	08/12/2019	21:36
MSA-SW38B-080819	240-117170-6	U1909142.d	08/12/2019	21:59
MSA-SW38C080819	240-117170-7	U1909143.d	08/12/2019	22:21
MSA-SW38D-080819	240-117170-8	U1909144.d	08/12/2019	22:44
MSA-SW39A-080819	240-117170-9	U1909145.d	08/12/2019	23:07
MSA-SW39B-080819	240-117170-10	U1909146.d	08/12/2019	23:29
MSA-SW39C-080819	240-117170-11	U1909147.d	08/12/2019	23:51
MSA-SW39D-080819	240-117170-12	U1909148.d	08/13/2019	00:14
MSA-SW40A-080819	240-117170-13	U1909149.d	08/13/2019	00:36
MSA-SW40B-080819	240-117170-14	U1909150.d	08/13/2019	00:58
MSA-SW40C-080819	240-117170-15	U1909151.d	08/13/2019	01:21
MSA-SW40D-080819	240-117170-16	U1909152.d	08/13/2019	01:43
MSA-SW41A-080819	240-117170-17	U1909153.d	08/13/2019	02:06
MSA-SW41B-080819	240-117170-18	U1909154.d	08/13/2019	02:28
MSA-SW41C-080819	240-117170-19	U1909155.d	08/13/2019	02:51
MSA-SW41D-080819	240-117170-20	U1909156.d	08/13/2019	03:13

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCV 240-395620/3 Calibration Date: 08/12/2019 17:52

Instrument ID: A3UX19 Calib Start Date: 07/25/2018 13:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2018 15:15

Lab File ID: U1909131.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Lin1		0.0376		0.189	0.200	-5.7	20.0
Diisopropyl ether	Ave	0.2313	0.2051		0.0177	0.0200	-11.3	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.3869		0.0194	0.0200	-2.8	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6282		0.0173	0.0200	-13.4	20.0
Ethyl acetate	Ave	0.3007	0.2894		0.0385	0.0400	-3.8	50.0
Propionitrile	Ave	0.0408	0.0512		0.251	0.200	25.6*	20.0
Methacrylonitrile	Ave	0.1828	0.1830		0.200	0.200	0.0	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.6866		0.0178	0.0200	-10.8	20.0
n-Butanol	Ave	0.0094	0.0124		0.663	0.500	32.6*	20.0
Ethyl acrylate	Ave	0.3703	0.3455		0.0187	0.0200	-6.7	20.0
Methyl methacrylate	Ave	0.2459	0.2152		0.0350	0.0400	-12.5	20.0
2-Nitropropane	Ave	0.0726	0.0909		0.0501	0.0400	25.3*	20.0
n-Butyl acetate	Ave	0.5364	0.5386		0.0201	0.0200	0.4	20.0
1-Chlorohexane	Ave	0.4610	0.4327		0.0188	0.0200	-6.1	20.0
Cyclohexanone	Ave	0.0137	0.0154		0.225	0.200	12.4	20.0
Pentachloroethane	Ave	0.3462	0.4922		0.0569	0.0400	42.2*	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.510		0.0221	0.0200	10.3	20.0
Benzyl chloride	Ave	1.286	1.814		0.0282	0.0200	41.0*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8843		0.0173	0.0200	-13.4	20.0
2-Methylnaphthalene	Ave	1.433	1.206		0.0337	0.0400	-15.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-395620/4 Calibration Date: 08/12/2019 18:14

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1909132.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	0.3850	0.3402	0.1000	0.0177	0.0200	-11.6	20.0
Chloromethane	Ave	0.2883	0.2539	0.1000	0.0176	0.0200	-12.0	20.0
Butadiene	Ave	0.2887	0.2805		0.0194	0.0200	-2.8	20.0
Vinyl chloride	Ave	0.2980	0.2689	0.1000	0.0180	0.0200	-9.8	20.0
Bromomethane	Ave	0.2335	0.2155	0.0500	0.0185	0.0200	-7.7	20.0
Chloroethane	Ave	0.1848	0.1839	0.0500	0.0199	0.0200	-0.5	20.0
Dichlorofluoromethane	Ave	0.4581	0.4184		0.0183	0.0200	-8.7	20.0
Trichlorofluoromethane	Ave	0.4984	0.4515	0.1000	0.0181	0.0200	-9.4	20.0
Ethyl ether	Ave	0.1800	0.1908		0.0212	0.0200	6.0	20.0
Acrolein	Ave	0.0445	0.0260		0.0585	0.100	-41.5	50.0
1,1-Dichloroethene	Ave	0.3589	0.3618	0.1000	0.0202	0.0200	0.8	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2567	0.2732	0.0500	0.0213	0.0200	6.4	20.0
Acetone	Ave	0.0784	0.0868	0.0100	0.0443	0.0400	10.6	50.0
Iodomethane	Ave	0.4655	0.4260		0.0183	0.0200	-8.5	20.0
Carbon disulfide	Ave	0.7515	0.7535	0.1000	0.0201	0.0200	0.3	20.0
3-Chloro-1-propene	Ave	0.3541	0.3002		0.0170	0.0200	-15.2	20.0
Methyl acetate	Ave	0.2328	0.2289	0.1000	0.0393	0.0400	-1.6	20.0
Methylene Chloride	Ave	0.2846	0.2899	0.1000	0.0204	0.0200	1.8	50.0
tert-Butyl alcohol	Ave	0.0271	0.0287		0.212	0.200	5.9	50.0
Acrylonitrile	Ave	0.1006	0.1121		0.223	0.200	11.5	20.0
Methyl tert-butyl ether	Ave	0.6938	0.6494	0.1000	0.0187	0.0200	-6.4	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3330	0.1000	0.0197	0.0200	-1.7	20.0
Hexane	Ave	0.3524	0.3337		0.0189	0.0200	-5.3	20.0
1,1-Dichloroethane	Ave	0.4048	0.4153	0.2000	0.0205	0.0200	2.6	20.0
Vinyl acetate	Ave	0.4639	0.4324		0.0186	0.0200	-6.8	50.0
2-Butanone	Ave	0.0472	0.0473	0.0100	0.0401	0.0400	0.2	20.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2755	0.1000	0.0191	0.0200	-4.7	20.0
2,2-Dichloropropane	Ave	0.2438	0.2447		0.0201	0.0200	0.4	20.0
Bromochloromethane	Ave	0.1945	0.1854		0.0191	0.0200	-4.7	20.0
Tetrahydrofuran	Lin1		0.0965		0.0370	0.0400	-7.4	20.0
Chloroform	Ave	0.4433	0.4456	0.2000	0.0201	0.0200	0.5	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3929	0.1000	0.0188	0.0200	-5.9	20.0
Cyclohexane	Ave	0.3819	0.3814	0.1000	0.0200	0.0200	-0.1	20.0
1,1-Dichloropropene	Ave	0.3519	0.3593		0.0204	0.0200	2.1	20.0
Carbon tetrachloride	Ave	0.4023	0.3755	0.1000	0.0187	0.0200	-6.7	20.0
Isobutyl alcohol	Ave	0.0110	0.0117		0.532	0.500	6.4	20.0
Benzene	Ave	0.9518	0.9633	0.5000	0.0202	0.0200	1.2	20.0
1,2-Dichloroethane	Ave	0.3600	0.3429	0.1000	0.0190	0.0200	-4.8	20.0
n-Heptane	Lin1		0.1633		0.0141	0.0200	-29.5*	20.0
Trichloroethene	Ave	0.3160	0.2806	0.1500	0.0178	0.0200	-11.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-395620/4 Calibration Date: 08/12/2019 18:14

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1909132.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4590	0.4110	0.1000	0.0179	0.0200	-10.5	20.0
1,2-Dichloropropane	Ave	0.2208	0.2171	0.1000	0.0197	0.0200	-1.7	20.0
1,4-Dioxane	Ave	0.0024	0.0034		0.568	0.400	41.9	50.0
Dibromomethane	Ave	0.2271	0.1818		0.0160	0.0200	-19.9	20.0
Bromodichloromethane	Ave	0.3479	0.3182	0.1500	0.0183	0.0200	-8.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1610		0.0364	0.0400	-9.1	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3514	0.1500	0.0182	0.0200	-9.1	20.0
4-Methyl-2-pentanone	Ave	0.3203	0.2933	0.0500	0.0366	0.0400	-8.4	20.0
Toluene	Ave	1.352	1.425	0.4000	0.0211	0.0200	5.4	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4477	0.1000	0.0186	0.0200	-7.1	20.0
Ethyl methacrylate	Ave	0.4344	0.4315		0.0199	0.0200	-0.7	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3006	0.1000	0.0212	0.0200	5.8	20.0
1,3-Dichloropropane	Ave	0.4802	0.4928		0.0205	0.0200	2.6	20.0
Tetrachloroethene	Ave	0.4313	0.3856	0.1500	0.0179	0.0200	-10.6	20.0
2-Hexanone	Ave	0.3149	0.3150	0.0500	0.0400	0.0400	0.0	20.0
Dibromochloromethane	Ave	0.3583	0.3424		0.0191	0.0200	-4.4	20.0
1,2-Dibromoethane	Ave	0.3346	0.3206		0.0192	0.0200	-4.2	20.0
Chlorobenzene	Ave	0.9253	0.9117	0.3000	0.0197	0.0200	-1.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3359		0.0201	0.0200	0.7	20.0
Ethylbenzene	Ave	0.4836	0.4861		0.0201	0.0200	0.5	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6134		0.0208	0.0200	4.1	20.0
o-Xylene	Ave	0.5597	0.5772		0.0206	0.0200	3.1	20.0
Styrene	Ave	0.9588	0.9707	0.3000	0.0202	0.0200	1.2	20.0
Bromoform	Ave	0.2933	0.2486	0.1000	0.0170	0.0200	-15.2	20.0
Isopropylbenzene	Ave	1.503	1.536	0.1000	0.0204	0.0200	2.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9336	0.3000	0.0242	0.0200	21.1*	20.0
Bromobenzene	Ave	0.7690	0.7373		0.0192	0.0200	-4.1	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3181		0.0218	0.0200	8.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.1778		0.0130	0.0200	-35.0*	20.0
n-Propylbenzene	Ave	0.7729	0.8171		0.0211	0.0200	5.7	20.0
2-Chlorotoluene	Ave	0.6541	0.7197		0.0220	0.0200	10.0	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.375		0.0213	0.0200	6.7	20.0
4-Chlorotoluene	Ave	0.7072	0.7243		0.0205	0.0200	2.4	20.0
tert-Butylbenzene	Ave	2.113	2.100		0.0199	0.0200	-0.6	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.417		0.0214	0.0200	7.1	20.0
sec-Butylbenzene	Ave	2.845	2.947		0.0207	0.0200	3.6	20.0
1,3-Dichlorobenzene	Ave	1.412	1.383	0.6000	0.0196	0.0200	-2.1	20.0
p-Isopropyltoluene	Ave	2.492	2.517		0.0202	0.0200	1.0	20.0
1,4-Dichlorobenzene	Ave	1.459	1.410	0.5000	0.0193	0.0200	-3.4	20.0
n-Butylbenzene	Ave	2.050	2.081		0.0203	0.0200	1.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.323	0.4000	0.0206	0.0200	3.2	20.0

FORM VII 8260C

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-395620/4 Calibration Date: 08/12/2019 18:14

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1909132.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2450	0.2378	0.0500	0.0194	0.0200	-3.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.6734	0.2000	0.0158	0.0200	-21.2	50.0
Hexachlorobutadiene	Ave	0.4392	0.2650		0.0121	0.0200	-39.7*	20.0
Naphthalene	Ave	2.363	2.375		0.0201	0.0200	0.5	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.6469		0.0169	0.0200	-15.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2499		0.0186	0.0200	-7.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.2932		0.0190	0.0200	-5.2	20.0
Toluene-d8 (Surr)	Ave	1.199	1.200		0.0200	0.0200	0.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4482		0.0199	0.0200	-0.7	20.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab File ID: bfb323.d BFB Injection Date: 08/13/2019

Instrument ID: A3UX19 BFB Injection Time: 17:15

Analysis Batch No.: 395857

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.6	
75	30.0 - 60.0 % of mass 95	52.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	75.9	
175	5.0 - 9.0 % of mass 174	6.1	(8.0) 1
176	95.0 - 101.0 % of mass 174	73.7	(97.0) 1
177	5.0 - 9.0 % of mass 176	4.9	(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
	CCV 240-395857/3	U1909157.d	08/13/2019	17:38
	CCVIS 240-395857/4	U1909158.d	08/13/2019	18:00
	LCS 240-395857/5	U1909159.d	08/13/2019	18:23
	MB 240-395857/8	U1909162.d	08/13/2019	19:30
MSA-SW42A-080819	240-117170-21	U1909163.d	08/13/2019	19:53
MSA-SW42B-080819	240-117170-22	U1909164.d	08/13/2019	20:15
MSA-SW42C-080819	240-117170-23	U1909165.d	08/13/2019	20:38
MSA-SW42D-080819	240-117170-24	U1909166.d	08/13/2019	21:00
MSA-SW43A-080819	240-117170-25	U1909167.d	08/13/2019	21:23
MSA-SW43B-080819	240-117170-26	U1909168.d	08/13/2019	21:45
MSA-SW43C-080819	240-117170-27	U1909169.d	08/13/2019	22:08
MSA-SW43D-080819	240-117170-28	U1909170.d	08/13/2019	22:30
MSA-SW44A-080819	240-117170-29	U1909171.d	08/13/2019	22:52
MSA-SW44B-080819	240-117170-30	U1909172.d	08/13/2019	23:15
MSA-SW44C-080819	240-117170-31	U1909173.d	08/13/2019	23:37
MSA-SW44D-080819	240-117170-32	U1909174.d	08/14/2019	00:00
MSA-SW45A-080819	240-117170-33	U1909175.d	08/14/2019	00:22
MSA-SW45B-080819	240-117170-34	U1909176.d	08/14/2019	00:45
MSA-SW45C-080819	240-117170-35	U1909177.d	08/14/2019	01:07
MSA-SW45D-080819	240-117170-36	U1909178.d	08/14/2019	01:30
EL-SW01A-080819	240-117170-37	U1909179.d	08/14/2019	01:53
EL-SW01B-080819	240-117170-38	U1909180.d	08/14/2019	02:15
EL-SW01C-080819	240-117170-39	U1909181.d	08/14/2019	02:38
EL-SW01D-080819	240-117170-40	U1909182.d	08/14/2019	03:01

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCV 240-395857/3 Calibration Date: 08/13/2019 17:38

Instrument ID: A3UX19 Calib Start Date: 07/25/2018 13:24

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/25/2018 15:15

Lab File ID: U1909157.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Lin1		0.0382		0.191	0.200	-4.4	20.0
Diisopropyl ether	Ave	0.2313	0.2155		0.0186	0.0200	-6.8	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.4036		0.0203	0.0200	1.4	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6268		0.0173	0.0200	-13.6	20.0
Ethyl acetate	Ave	0.3007	0.3239		0.0431	0.0400	7.7	20.0
Propionitrile	Ave	0.0408	0.0577		0.283	0.200	41.6*	20.0
Methacrylonitrile	Ave	0.1828	0.2015		0.220	0.200	10.2	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.6903		0.0179	0.0200	-10.4	20.0
n-Butanol	Ave	0.0094	0.0135		0.722	0.500	44.3*	20.0
Ethyl acrylate	Ave	0.3703	0.4035		0.0218	0.0200	9.0	20.0
Methyl methacrylate	Ave	0.2459	0.2437		0.0396	0.0400	-0.9	20.0
2-Nitropropane	Ave	0.0726	0.0969		0.0534	0.0400	33.5*	20.0
n-Butyl acetate	Ave	0.5364	0.5598		0.0209	0.0200	4.4	20.0
1-Chlorohexane	Ave	0.4610	0.4826		0.0209	0.0200	4.7	20.0
Cyclohexanone	Ave	0.0137	0.0173		0.252	0.200	26.2*	20.0
Pentachloroethane	Ave	0.3462	0.5215		0.0603	0.0400	50.6*	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.733		0.0240	0.0200	20.1*	20.0
Benzyl chloride	Ave	1.286	1.860		0.0289	0.0200	44.6*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	1.036		0.0203	0.0200	1.4	20.0
2-Methylnaphthalene	Ave	1.433	1.456		0.0407	0.0400	1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-395857/4 Calibration Date: 08/13/2019 18:00

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1909158.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	0.3850	0.3500	0.1000	0.0182	0.0200	-9.1	20.0
Chloromethane	Ave	0.2883	0.2506	0.1000	0.0174	0.0200	-13.1	20.0
Butadiene	Ave	0.2887	0.2540		0.0176	0.0200	-12.0	20.0
Vinyl chloride	Ave	0.2980	0.2796	0.1000	0.0188	0.0200	-6.2	20.0
Bromomethane	Ave	0.2335	0.2224	0.0500	0.0190	0.0200	-4.8	20.0
Chloroethane	Ave	0.1848	0.1807	0.0500	0.0196	0.0200	-2.2	20.0
Dichlorofluoromethane	Ave	0.4581	0.4306		0.0188	0.0200	-6.0	20.0
Trichlorofluoromethane	Ave	0.4984	0.4615	0.1000	0.0185	0.0200	-7.4	20.0
Ethyl ether	Ave	0.1800	0.1953		0.0217	0.0200	8.5	20.0
Acrolein	Ave	0.0445	0.0243		0.0547	0.100	-45.3*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3654	0.1000	0.0204	0.0200	1.8	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2567	0.2639	0.0500	0.0206	0.0200	2.8	20.0
Acetone	Ave	0.0784	0.0857	0.0100	0.0437	0.0400	9.3	50.0
Iodomethane	Ave	0.4655	0.4322		0.0186	0.0200	-7.1	20.0
Carbon disulfide	Ave	0.7515	0.7562	0.1000	0.0201	0.0200	0.6	20.0
3-Chloro-1-propene	Ave	0.3541	0.3066		0.0173	0.0200	-13.4	20.0
Methyl acetate	Ave	0.2328	0.2253	0.1000	0.0387	0.0400	-3.2	50.0
Methylene Chloride	Ave	0.2846	0.2879	0.1000	0.0202	0.0200	1.1	50.0
tert-Butyl alcohol	Ave	0.0271	0.0244		0.180	0.200	-10.0	20.0
Acrylonitrile	Ave	0.1006	0.1119		0.223	0.200	11.3	20.0
Methyl tert-butyl ether	Ave	0.6938	0.6458	0.1000	0.0186	0.0200	-6.9	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3421	0.1000	0.0202	0.0200	1.0	20.0
Hexane	Ave	0.3524	0.3281		0.0186	0.0200	-6.9	20.0
1,1-Dichloroethane	Ave	0.4048	0.4264	0.2000	0.0211	0.0200	5.3	20.0
Vinyl acetate	Ave	0.4639	0.4032		0.0174	0.0200	-13.1	20.0
2-Butanone	Ave	0.0472	0.0452	0.0100	0.0382	0.0400	-4.4	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2865	0.1000	0.0198	0.0200	-0.9	20.0
2,2-Dichloropropane	Ave	0.2438	0.2488		0.0204	0.0200	2.1	20.0
Bromochloromethane	Ave	0.1945	0.1863		0.0192	0.0200	-4.2	20.0
Tetrahydrofuran	Lin1		0.0941		0.0361	0.0400	-9.8	20.0
Chloroform	Ave	0.4433	0.4594	0.2000	0.0207	0.0200	3.6	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.4021	0.1000	0.0193	0.0200	-3.7	20.0
Cyclohexane	Ave	0.3819	0.3784	0.1000	0.0198	0.0200	-0.9	20.0
1,1-Dichloropropene	Ave	0.3519	0.3480		0.0198	0.0200	-1.1	20.0
Carbon tetrachloride	Ave	0.4023	0.3769	0.1000	0.0187	0.0200	-6.3	20.0
Isobutyl alcohol	Ave	0.0110	0.0101		0.460	0.500	-8.0	20.0
Benzene	Ave	0.9518	0.9794	0.5000	0.0206	0.0200	2.9	20.0
1,2-Dichloroethane	Ave	0.3600	0.3437	0.1000	0.0191	0.0200	-4.5	20.0
n-Heptane	Lin1		0.1604		0.0138	0.0200	-31.1*	20.0
Trichloroethene	Ave	0.3160	0.2878	0.1500	0.0182	0.0200	-8.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-395857/4 Calibration Date: 08/13/2019 18:00

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1909158.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4590	0.4117	0.1000	0.0179	0.0200	-10.3	20.0
1,2-Dichloropropane	Ave	0.2208	0.2190	0.1000	0.0198	0.0200	-0.8	20.0
1,4-Dioxane	Ave	0.0024	0.0031		0.519	0.400	29.8	50.0
Dibromomethane	Ave	0.2271	0.1799		0.0158	0.0200	-20.8*	20.0
Bromodichloromethane	Ave	0.3479	0.3216	0.1500	0.0185	0.0200	-7.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1582		0.0358	0.0400	-10.6	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3415	0.1500	0.0177	0.0200	-11.6	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.2854	0.0500	0.0356	0.0400	-10.9	50.0
Toluene	Ave	1.352	1.427	0.4000	0.0211	0.0200	5.6	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4452	0.1000	0.0185	0.0200	-7.6	20.0
Ethyl methacrylate	Ave	0.4344	0.4251		0.0196	0.0200	-2.2	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3004	0.1000	0.0211	0.0200	5.7	20.0
1,3-Dichloropropane	Ave	0.4802	0.4977		0.0207	0.0200	3.6	20.0
Tetrachloroethene	Ave	0.4313	0.3930	0.1500	0.0182	0.0200	-8.9	20.0
2-Hexanone	Ave	0.3149	0.3073	0.0500	0.0390	0.0400	-2.4	50.0
Dibromochloromethane	Ave	0.3583	0.3405		0.0190	0.0200	-5.0	20.0
1,2-Dibromoethane	Ave	0.3346	0.3299		0.0197	0.0200	-1.4	20.0
Chlorobenzene	Ave	0.9253	0.9250	0.3000	0.0200	0.0200	-0.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3340		0.0200	0.0200	0.1	20.0
Ethylbenzene	Ave	0.4836	0.4939		0.0204	0.0200	2.1	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6096		0.0207	0.0200	3.5	20.0
o-Xylene	Ave	0.5597	0.5990		0.0214	0.0200	7.0	20.0
Styrene	Ave	0.9588	0.9914	0.3000	0.0207	0.0200	3.4	20.0
Bromoform	Ave	0.2933	0.2514	0.1000	0.0171	0.0200	-14.3	20.0
Isopropylbenzene	Ave	1.503	1.569	0.1000	0.0209	0.0200	4.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.8849	0.3000	0.0230	0.0200	14.8	20.0
Bromobenzene	Ave	0.7690	0.7285		0.0189	0.0200	-5.3	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3073		0.0210	0.0200	5.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2560		0.0187	0.0200	-6.5	20.0
n-Propylbenzene	Ave	0.7729	0.7974		0.0206	0.0200	3.2	20.0
2-Chlorotoluene	Ave	0.6541	0.6967		0.0213	0.0200	6.5	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.369		0.0213	0.0200	6.4	20.0
4-Chlorotoluene	Ave	0.7072	0.7251		0.0205	0.0200	2.5	20.0
tert-Butylbenzene	Ave	2.113	2.079		0.0197	0.0200	-1.6	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.431		0.0215	0.0200	7.7	20.0
sec-Butylbenzene	Ave	2.845	2.880		0.0202	0.0200	1.2	20.0
1,3-Dichlorobenzene	Ave	1.412	1.385	0.6000	0.0196	0.0200	-1.9	20.0
p-Isopropyltoluene	Ave	2.492	2.515		0.0202	0.0200	1.0	20.0
1,4-Dichlorobenzene	Ave	1.459	1.419	0.5000	0.0194	0.0200	-2.8	20.0
n-Butylbenzene	Ave	2.050	2.085		0.0203	0.0200	1.7	20.0
1,2-Dichlorobenzene	Ave	1.282	1.391	0.4000	0.0217	0.0200	8.5	20.0

FORM VII 8260C

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: CCVIS 240-395857/4 Calibration Date: 08/13/2019 18:00

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1909158.d Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2450	0.2435	0.0500	0.0199	0.0200	-0.6	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.7560	0.2000	0.0177	0.0200	-11.6	50.0
Hexachlorobutadiene	Ave	0.4392	0.2787		0.0127	0.0200	-36.6	50.0
Naphthalene	Ave	2.363	2.607		0.0221	0.0200	10.3	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.7247		0.0189	0.0200	-5.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2615		0.0194	0.0200	-2.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.3007		0.0195	0.0200	-2.7	20.0
Toluene-d8 (Surr)	Ave	1.199	1.254		0.0209	0.0200	4.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4731		0.0210	0.0200	4.8	20.0

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Sample No.: ICIS 240-378870/11 Date Analyzed: 04/30/2019 15:17

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1269798.D Heated Purge: (Y/N) N

Calibration ID: 50823

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1246876	5.10	855324	7.76	464704	9.97
UPPER LIMIT		2493752	5.60	1710648	8.26	929408	10.47
LOWER LIMIT		623438	4.60	427662	7.26	232352	9.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-396858/4		1118681	5.10	823295	7.75	423055	9.97

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Sample No.: CCVIS 240-396858/4 Date Analyzed: 08/20/2019 16:38

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1272400.D Heated Purge: (Y/N) N

Calibration ID: 50829

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1118681	5.10	823295	7.75	423055	9.97
UPPER LIMIT		2237362	5.60	1646590	8.25	846110	10.47
LOWER LIMIT		559341	4.60	411648	7.25	211528	9.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-396858/5		1147893	5.10	876227	7.75	444135	9.97
MB 240-396858/7		1063679	5.10	794831	7.75	409052	9.97
240-117170-41	TB-080819	1019371	5.10	728223	7.76	383000	9.97
240-117170-42	MSA-SW46A-080819	988980	5.10	707122	7.75	375336	9.97
240-117170-43	MSA-SW47A-080819	1040371	5.10	781342	7.76	419217	9.97
240-117170-44	MSA-SW48A-080819	1063477	5.10	795191	7.76	417999	9.97
240-117170-45	MSA-SW49A-080819	1076924	5.10	794214	7.75	403196	9.97

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Sample No.: ICIS 240-342719/10 Date Analyzed: 08/27/2018 18:16

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1901326.d Heated Purge: (Y/N) N

Calibration ID: 46687

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		972482	5.65	783101	8.50	430906	10.88
UPPER LIMIT		1944964	6.15	1566202	9.00	861812	11.38
LOWER LIMIT		486241	5.15	391551	8.00	215453	10.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-342719/14		955207	5.65	765531	8.50	424750	10.88
CCVIS 240-395620/4		934197	5.67	667111	8.50	341609	10.88
CCVIS 240-395857/4		903590	5.67	646408	8.50	350291	10.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Sample No.: CCVIS 240-395620/4 Date Analyzed: 08/12/2019 18:14

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1909132.d Heated Purge: (Y/N) N

Calibration ID: 51687

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		934197	5.67	667111	8.50	341609	10.88
UPPER LIMIT		1868394	6.17	1334222	9.00	683218	11.38
LOWER LIMIT		467099	5.17	333556	8.00	170805	10.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-395620/5		974759	5.65	719264	8.50	377898	10.88
MB 240-395620/8		870212	5.65	638154	8.50	317223	10.88
240-117170-1	MSA-SW37A-080819	851345	5.67	605385	8.50	297358	10.88
240-117170-2	MSA-SW37B-080819	828498	5.67	592600	8.50	295922	10.88
240-117170-3	MSA-SW37C-080819	842462	5.67	597443	8.50	298993	10.88
240-117170-4	MSA-SW37D-080819	828839	5.67	586921	8.50	300064	10.88
240-117170-5	MSA-SW38A-080819	858437	5.67	626375	8.50	311592	10.88
240-117170-6	MSA-SW38B-080819	824667	5.67	587648	8.50	294400	10.88
240-117170-7	MSA-SW38C080819	819615	5.67	589133	8.50	293546	10.88
240-117170-8	MSA-SW38D-080819	834433	5.65	622237	8.50	301402	10.88
240-117170-9	MSA-SW39A-080819	825495	5.67	611345	8.50	294940	10.88
240-117170-10	MSA-SW39B-080819	835826	5.67	609661	8.50	298716	10.88
240-117170-11	MSA-SW39C-080819	813757	5.65	571153	8.50	289073	10.88
240-117170-12	MSA-SW39D-080819	797870	5.67	563143	8.50	276192	10.88
240-117170-13	MSA-SW40A-080819	828075	5.67	605859	8.50	292203	10.88
240-117170-14	MSA-SW40B-080819	799281	5.67	557831	8.50	278422	10.88
240-117170-15	MSA-SW40C-080819	795310	5.65	577091	8.50	290128	10.88
240-117170-16	MSA-SW40D-080819	824624	5.67	602913	8.50	293257	10.88
240-117170-17	MSA-SW41A-080819	802188	5.67	577291	8.50	279021	10.88
240-117170-18	MSA-SW41B-080819	797675	5.67	570942	8.50	283688	10.88
240-117170-19	MSA-SW41C-080819	791868	5.65	565544	8.50	275183	10.88
240-117170-20	MSA-SW41D-080819	806505	5.67	605139	8.50	287459	10.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Sample No.: CCVIS 240-395857/4 Date Analyzed: 08/13/2019 18:00

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1909158.d Heated Purge: (Y/N) N

Calibration ID: 51687

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		903590	5.67	646408	8.50	350291	10.88
UPPER LIMIT		1807180	6.17	1292816	9.00	700582	11.38
LOWER LIMIT		451795	5.17	323204	8.00	175146	10.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-395857/5		931759	5.65	687607	8.50	352799	10.88
MB 240-395857/8		837675	5.67	622290	8.50	307594	10.88
240-117170-21	MSA-SW42A-080819	820171	5.67	586894	8.50	288732	10.88
240-117170-22	MSA-SW42B-080819	810813	5.67	572095	8.50	278798	10.88
240-117170-23	MSA-SW42C-080819	849245	5.67	627152	8.50	300772	10.88
240-117170-24	MSA-SW42D-080819	827893	5.65	612184	8.50	294978	10.88
240-117170-25	MSA-SW43A-080819	802618	5.67	574500	8.50	284189	10.88
240-117170-26	MSA-SW43B-080819	817125	5.67	611161	8.50	283642	10.88
240-117170-27	MSA-SW43C-080819	810004	5.67	601540	8.50	285903	10.88
240-117170-28	MSA-SW43D-080819	796987	5.67	576758	8.50	273434	10.88
240-117170-29	MSA-SW44A-080819	823106	5.65	605803	8.50	296413	10.88
240-117170-30	MSA-SW44B-080819	781984	5.67	557204	8.50	269088	10.88
240-117170-31	MSA-SW44C-080819	798777	5.67	570415	8.50	279029	10.88
240-117170-32	MSA-SW44D-080819	779622	5.67	555954	8.50	267851	10.88
240-117170-33	MSA-SW45A-080819	810482	5.67	601719	8.50	286995	10.88
240-117170-34	MSA-SW45B-080819	788849	5.67	551924	8.50	277379	10.88
240-117170-35	MSA-SW45C-080819	792034	5.67	561370	8.50	267376	10.88
240-117170-36	MSA-SW45D-080819	810839	5.67	596700	8.50	291633	10.88
240-117170-37	EL-SW01A-080819	813457	5.67	596453	8.50	289947	10.88
240-117170-38	EL-SW01B-080819	786816	5.67	565613	8.50	272315	10.88
240-117170-39	EL-SW01C-080819	801249	5.67	571387	8.50	271813	10.88
240-117170-40	EL-SW01D-080819	783438	5.67	561222	8.50	276752	10.88

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

SAMPLE IDENTIFICATION	MSA-SW49A-080819	
COMPOUND	Toluene	
COMPOUND AREA	13704	
INTERNAL STANDARD AMOUNT (ug)	20	
DILUTION FACTOR	1	
INTERNAL STANDARD AREA	794214	
AVERAGE RRF	1.6738	
13704 x 20 / 794214 x 1.6738	0.2062	ug/L
0.206175114195941 x 1	0.21	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW49A-080819
Lab Sample ID: 240-117170-45
Matrix: Water
Lab File ID: U1272413.D
Analysis Method: 8260C
Date Collected: 08/08/2019 09:32
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 21:10
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.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.14
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.17
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.14
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.24
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.14
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.26
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.070
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.15
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.16
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.31
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.26
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.54
108-86-1	Bromobenzene	1.0	U	1.0	0.12
74-97-5	Bromochloromethane	1.0	U	1.0	0.14
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.090
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.13
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.28
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.26
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
75-00-3	Chloroethane	1.0	U	1.0	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Client Sample ID: MSA-SW49A-080819 Lab Sample ID: 240-117170-45

Matrix: Water Lab File ID: U1272413.D

Analysis Method: 8260C Date Collected: 08/08/2019 09:32

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2019 21:10

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.: 396858 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.13
74-87-3	Chloromethane	1.0	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.61
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.83
74-95-3	Dibromomethane	1.0	U	1.0	0.090
75-27-4	Bromodichloromethane	1.0	U	1.0	0.17
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.11
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.12
108-20-3	Diisopropyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.32
179601-23-1	m-Xylene & p-Xylene	0.10	J	2.0	0.080
104-51-8	n-Butylbenzene	1.0	U	1.0	0.14
98-82-8	Isopropylbenzene	1.0	U	1.0	0.090
103-65-1	n-Propylbenzene	1.0	U	1.0	0.15
78-93-3	2-Butanone	5.0	U	5.0	1.2
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.42
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.070
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.11
75-09-2	Methylene Chloride	5.0	U	5.0	2.6
95-47-6	o-Xylene	1.0	U	1.0	0.090
100-42-5	Styrene	1.0	U	1.0	0.10
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.15
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.14
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
108-88-3	Toluene	0.21	J	1.0	0.14
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	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.10
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	0.50	U	0.50	0.20
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.15

FORM I 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Client Sample ID: MSA-SW49A-080819
Lab Sample ID: 240-117170-45
Matrix: Water
Lab File ID: U1272413.D
Analysis Method: 8260C
Date Collected: 08/08/2019 09:32
Sample wt/vol: 5(mL)
Date Analyzed: 08/20/2019 21:10
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.: 396858
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121
460-00-4	4-Bromofluorobenzene (Surr)	88		59-120
2037-26-5	Toluene-d8 (Surr)	90		70-123
1868-53-7	Dibromofluoromethane (Surr)	95		75-128

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190820-90278.b\U1272413.D
Lims ID: 240-117170-B-45
Client ID: MSA-SW49A-080819
Sample Type: Client
Inject. Date: 20-Aug-2019 21:10:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0090278-017
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190820-90278.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 21-Aug-2019 15:36:17 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: laveyt Date: 21-Aug-2019 15:36:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1076924	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	85	794214	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	403196	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	93	271130	18.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	95	322683	20.1	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	1011345	18.0	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	96	363137	17.5	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.593				ND	
12 Vinyl chloride	62		1.675				ND	
14 Bromomethane	94		1.912				ND	
15 Chloroethane	64		1.995				ND	
17 Trichlorofluoromethane	101		2.208				ND	
21 1,1-Dichloroethene	61		2.634				ND	
22 1,1,2-Trichloro-1,2,2-trif	101		2.669				ND	
23 Acetone	43		2.693				ND	
25 Carbon disulfide	76		2.811				ND	
29 Methylene Chloride	49		3.060				ND	
30 2-Methyl-2-propanol	59		3.166				ND	
32 trans-1,2-Dichloroethene	61		3.285				ND	
33 Methyl tert-butyl ether	73		3.285				ND	
35 1,1-Dichloroethane	63		3.652				ND	
36 Vinyl acetate	43		3.687				ND	
37 Isopropyl ether	87		3.699				ND	
39 Tert-butyl ethyl ether	59		4.007				ND	
40 cis-1,2-Dichloroethene	96		4.137				ND	
41 2,2-Dichloropropane	77		4.137				ND	
42 2-Butanone (MEK)	72		4.149				ND	
46 Chlorobromomethane	49		4.338				ND	
48 Chloroform	83		4.397				ND	
49 1,1,1-Trichloroethane	97		4.551				ND	
51 1,1-Dichloropropene	75		4.693				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		4.693				ND	
54 Benzene	78	4.858	4.859	-0.001	87	7223	0.1139	
55 1,2-Dichloroethane	62		4.882				ND	
56 Tert-amyl methyl ether	73		4.953				ND	
59 Trichloroethene	130		5.403				ND	
62 1,2-Dichloropropane	63		5.604				ND	
64 Dibromomethane	174		5.699				ND	
66 Dichlorobromomethane	83		5.829				ND	
68 2-Chloroethyl vinyl ether	63		6.089				ND	
69 cis-1,3-Dichloropropene	75		6.219				ND	
70 4-Methyl-2-pentanone (MIBK	43		6.349				ND	U
71 Toluene	91	6.515	6.515	0.000	98	13704	0.2062	
72 trans-1,3-Dichloropropene	75		6.704				ND	
76 Tetrachloroethene	166		7.000				ND	
77 1,3-Dichloropropane	76		7.024				ND	
78 2-Hexanone	43		7.095				ND	
80 Chlorodibromomethane	129		7.225				ND	
81 Ethylene Dibromide	107		7.332				ND	
83 Chlorobenzene	112		7.781				ND	
84 1,1,1,2-Tetrachloroethane	131		7.852				ND	
85 Ethylbenzene	106		7.876				ND	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	95	3115	0.1049	
87 o-Xylene	106		8.361				ND	
88 Styrene	104		8.373				ND	
89 Bromoform	173		8.550				ND	
90 Isopropylbenzene	105		8.704				ND	
92 1,1,2,2-Tetrachloroethane	83		9.000				ND	
93 Bromobenzene	156		9.000				ND	
95 1,2,3-Trichloropropane	110		9.036				ND	
96 N-Propylbenzene	120		9.095				ND	
97 2-Chlorotoluene	126		9.189				ND	
99 4-Chlorotoluene	126		9.284				ND	
102 tert-Butylbenzene	119		9.592				ND	
104 1,2,4-Trimethylbenzene	105		9.627				ND	
105 sec-Butylbenzene	105		9.793				ND	
106 1,3-Dichlorobenzene	146		9.911				ND	
107 4-Isopropyltoluene	119		9.947				ND	
108 1,4-Dichlorobenzene	146		9.994				ND	
109 1,2,3-Trimethylbenzene	105		10.041				ND	
111 n-Butylbenzene	91		10.337				ND	
112 1,2-Dichlorobenzene	146		10.361				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.142				ND	
115 1,2,4-Trichlorobenzene	180		11.946				ND	
116 Hexachlorobutadiene	225		12.124				ND	
117 Naphthalene	128		12.195				ND	
118 1,2,3-Trichlorobenzene	180		12.432				ND	
S 128 Xylenes, Total	106				0		0.1049	
T 129 Chlorodifluoromethane TIC	51		1.140				ND	

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.3547 0.3535	0.3314 0.3513	0.3425	0.3636	0.3768	Ave		0.3534			0.1000	4.1		20.0			
Isobutyl alcohol	0.0214 0.0190	0.0189 +++++	0.0202	0.0197	0.0201	Ave		0.0199				4.6		20.0			
Benzene	1.2351 1.1561	1.2006 1.1376	1.1748	1.1526	1.1878	Ave		1.1778			0.5000	2.8		20.0			
1,2-Dichloroethane	0.3915 0.3540	0.3893 0.3393	0.3455	0.3539	0.3641	Ave		0.3625			0.1000	5.7		20.0			
n-Heptane	+++++ 0.2241	0.8189 0.2083	0.2765	0.2406	0.2291	Lin1	0.6210	0.2083				3.9			0.9990		0.9900
Trichloroethene	0.3459 0.3108	0.3166 0.3021	0.3026	0.3105	0.3179	Ave		0.3152			0.1500	4.7		20.0			
Methylcyclohexane	0.5757 0.5798	0.5136 0.5210	0.5842	0.5782	0.5985	Ave		0.5644			0.1000	5.9		20.0			
1,2-Dichloropropane	0.2504 0.2495	0.2406 0.2466	0.2499	0.2468	0.2580	Ave		0.2488			0.1000	2.1		20.0			
Dibromomethane	0.2511 0.2018	0.2266 0.1879	0.1970	0.2002	0.2123	Ave		0.2110				10.2		20.0			
1,4-Dioxane	0.0035 0.0040	0.0034 0.0038	0.0047	0.0044	0.0043	Ave		0.0040				12.1		20.0			
Bromodichloromethane	0.3369 0.3474	0.3224 0.3346	0.3359	0.3412	0.3584	Ave		0.3396			0.1500	3.3		20.0			
2-Chloroethyl vinyl ether	0.1875 0.1911	0.1776 0.1507	0.1862	0.1818	0.1895	Ave		0.1806				7.7		20.0			
cis-1,3-Dichloropropene	0.4366 0.4171	0.4107 0.3952	0.4011	0.4068	0.4265	Ave		0.4134			0.1500	3.5		20.0			
4-Methyl-2-pentanone	0.3839 0.3806	0.3808 +++++	0.3872	0.3769	0.3911	Ave		0.3834			0.0500	1.3		20.0			
Toluene	1.8023 1.6267	1.6891 1.6145	1.6659	1.6181	1.7001	Ave		1.6738			0.4000	4.0		20.0			
trans-1,3-Dichloropropene	0.5769 0.5343	0.5645 0.5065	0.5263	0.5262	0.5576	Ave		0.5418			0.1000	4.6		20.0			
Ethyl methacrylate	0.5226 0.5394	0.4946 0.4478	0.5518	0.5362	0.5613	Ave		0.5220				7.5		20.0			
1,1,2-Trichloroethane	0.3778 0.3286	0.3178 0.3033	0.3333	0.3248	0.3429	Ave		0.3327			0.1000	7.1		20.0			
Tetrachloroethene	0.4570 0.4417	0.4243 0.4396	0.4476	0.4415	0.4623	Ave		0.4449			0.1500	2.8		20.0			
1,3-Dichloropropane	0.6595 0.5804	0.5855 0.5367	0.5879	0.5738	0.6044	Ave		0.5898				6.3		20.0			

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

METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG No.:

Project: MSA Surface Water

Client Sample ID	Lab Sample ID
MSA-SW37A-080819	240-117170-1
MSA-SW37B-080819	240-117170-2
MSA-SW37C-080819	240-117170-3
MSA-SW37D-080819	240-117170-4
MSA-SW38A-080819	240-117170-5
MSA-SW38B-080819	240-117170-6
MSA-SW38C080819	240-117170-7
MSA-SW38D-080819	240-117170-8
MSA-SW39A-080819	240-117170-9
MSA-SW39B-080819	240-117170-10
MSA-SW39C-080819	240-117170-11
MSA-SW39D-080819	240-117170-12
MSA-SW40A-080819	240-117170-13
MSA-SW40B-080819	240-117170-14
MSA-SW40C-080819	240-117170-15
MSA-SW40D-080819	240-117170-16
MSA-SW41A-080819	240-117170-17
MSA-SW41B-080819	240-117170-18
MSA-SW41C-080819	240-117170-19
MSA-SW41D-080819	240-117170-20
MSA-SW42A-080819	240-117170-21
MSA-SW42B-080819	240-117170-22
MSA-SW42C-080819	240-117170-23
MSA-SW42D-080819	240-117170-24
MSA-SW43A-080819	240-117170-25
MSA-SW43B-080819	240-117170-26
MSA-SW43C-080819	240-117170-27
MSA-SW43D-080819	240-117170-28
MSA-SW44A-080819	240-117170-29
MSA-SW44B-080819	240-117170-30
MSA-SW44C-080819	240-117170-31
MSA-SW44D-080819	240-117170-32
MSA-SW45A-080819	240-117170-33
MSA-SW45B-080819	240-117170-34
MSA-SW45C-080819	240-117170-35
MSA-SW45D-080819	240-117170-36

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: MTMSICVW_00092 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00241

Analyte	ICV 240-395927/7 08/13/2019 16:06				CCV 240-395927/26 08/13/2019 16:51				CCV 240-395927/38 08/13/2019 17:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	40.9		40.0	102	51.9		50.0	104	51.4		50.0	103
Arsenic	39.1		40.0	98	49.0		50.0	98	49.2		50.0	98
Barium	39.4		40.0	99	51.5		50.0	103	50.2		50.0	100
Beryllium	40.5		40.0	101	50.6		50.0	101	49.6		50.0	99
Cadmium	40.1		40.0	100	50.9		50.0	102	50.1		50.0	100
Calcium	20100		20000	100	25600		25000	103	25700		25000	103
Chromium	40.4		40.0	101	50.5		50.0	101	50.6		50.0	101
Cobalt	39.5		40.0	99	49.8		50.0	100	49.4		50.0	99
Copper	40.2		40.0	100	50.4		50.0	101	50.5		50.0	101
Lead	40.8		40.0	102	50.9		50.0	102	49.7		50.0	99
Magnesium	19900		20000	99	25100		25000	100	25400		25000	101
Molybdenum	41.5		40.0	104	52.3		50.0	105	52.1		50.0	104
Nickel	40.0		40.0	100	49.6		50.0	99	50.2		50.0	100
Selenium	39.4		40.0	99	50.7		50.0	101	51.0		50.0	102
Silver	41.5		40.0	104	50.1		50.0	100	49.5		50.0	99
Thallium	38.3		40.0	96	48.6		50.0	97	47.7		50.0	95
Tungsten	41.9		40.0	105	53.2		50.0	106	51.5		50.0	103
Vanadium	39.7		40.0	99	49.9		50.0	100	50.0		50.0	100
Zinc	40.5		40.0	101	50.6		50.0	101	51.0		50.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: MTMSICVW_00092 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00241

Analyte	CCV 240-395927/50 08/13/2019 17:47				CCV 240-395927/62 08/13/2019 18:15				CCV 240-395927/74 08/13/2019 18:44			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.1		50.0	102	51.6		50.0	103	51.6		50.0	103
Arsenic	49.1		50.0	98	48.3		50.0	97	50.0		50.0	100
Barium	49.3		50.0	99	49.8		50.0	100	50.6		50.0	101
Beryllium	50.1		50.0	100	49.3		50.0	99	49.2		50.0	98
Cadmium	49.8		50.0	100	50.1		50.0	100	50.3		50.0	101
Calcium	25500		25000	102	25500		25000	102	25600		25000	103
Chromium	50.1		50.0	100	50.2		50.0	100	49.8		50.0	100
Cobalt	49.8		50.0	100	48.8		50.0	98	50.1		50.0	100
Copper	49.9		50.0	100	49.7		50.0	99	50.3		50.0	101
Lead	49.7		50.0	99	50.2		50.0	100	50.0		50.0	100
Magnesium	25400		25000	101	24900		25000	100	25100		25000	101
Molybdenum	51.6		50.0	103	52.0		50.0	104	52.5		50.0	105
Nickel	49.7		50.0	99	49.3		50.0	99	50.1		50.0	100
Selenium	49.8		50.0	100	50.3		50.0	101	49.9		50.0	100
Silver	49.6		50.0	99	49.2		50.0	98	49.5		50.0	99
Thallium	47.6		50.0	95	48.3		50.0	97	48.3		50.0	97
Tungsten	50.2		50.0	100	50.5		50.0	101	50.8		50.0	102
Vanadium	49.8		50.0	100	49.9		50.0	100	49.5		50.0	99
Zinc	51.6		50.0	103	50.2		50.0	100	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.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: MTMSICVW_00092 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00241

Analyte	CCV 240-395927/86 08/13/2019 19:13				CCV 240-395927/98 08/13/2019 19:41							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.0		50.0	102	51.5		50.0	103				
Arsenic	49.6		50.0	99	49.5		50.0	99				
Barium	49.6		50.0	99	50.1		50.0	100				
Beryllium	49.4		50.0	99	48.2		50.0	96				
Cadmium	50.3		50.0	101	50.1		50.0	100				
Calcium	25800		25000	103	25600		25000	102				
Chromium	49.7		50.0	99	49.5		50.0	99				
Cobalt	49.9		50.0	100	49.0		50.0	98				
Copper	49.9		50.0	100	49.8		50.0	100				
Lead	49.3		50.0	99	49.2		50.0	98				
Magnesium	25300		25000	101	25000		25000	100				
Molybdenum	52.4		50.0	105	52.2		50.0	104				
Nickel	50.1		50.0	100	49.1		50.0	98				
Selenium	50.1		50.0	100	51.0		50.0	102				
Silver	49.5		50.0	99	49.1		50.0	98				
Thallium	47.6		50.0	95	46.9		50.0	94				
Tungsten	50.4		50.0	101	49.1		50.0	98				
Vanadium	49.4		50.0	99	49.2		50.0	98				
Zinc	50.9		50.0	102	51.1		50.0	102				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: ICVLCCVLICPMS_00002 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00241

Analyte	ICVL 240-395927/9 08/13/2019 16:11				CCV 240-395927/26 08/13/2019 16:51				CCV 240-395927/38 08/13/2019 17:18			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	2.02		2.00	101	51.9		50.0	104	51.4		50.0	103
Arsenic	4.98	J	5.00	100	49.0		50.0	98	49.2		50.0	98
Barium	4.80	J	5.00	96	51.5		50.0	103	50.2		50.0	100
Beryllium	1.01		1.00	101	50.6		50.0	101	49.6		50.0	99
Cadmium	1.02		1.00	102	50.9		50.0	102	50.1		50.0	100
Calcium	1020		1000	102	25600		25000	103	25700		25000	103
Chromium	2.02		2.00	101	50.5		50.0	101	50.6		50.0	101
Cobalt	1.00		1.00	100	49.8		50.0	100	49.4		50.0	99
Copper	2.00		2.00	100	50.4		50.0	101	50.5		50.0	101
Lead	1.04		1.00	104	50.9		50.0	102	49.7		50.0	99
Magnesium	995	J	1000	99	25100		25000	100	25400		25000	101
Molybdenum	5.12		5.00	102	52.3		50.0	105	52.1		50.0	104
Nickel	1.97	J	2.00	98	49.6		50.0	99	50.2		50.0	100
Selenium	5.03		5.00	101	50.7		50.0	101	51.0		50.0	102
Silver	1.02		1.00	102	50.1		50.0	100	49.5		50.0	99
Thallium	1.01		1.00	101	48.6		50.0	97	47.7		50.0	95
Tungsten	9.84	J	10.0	98	53.2		50.0	106	51.5		50.0	103
Vanadium	4.89	J	5.00	98	49.9		50.0	100	50.0		50.0	100
Zinc	19.7	J	20.0	99	50.6		50.0	101	51.0		50.0	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: ICVLCCVLICPMS_00002 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00241

Analyte	CCV 240-395927/50 08/13/2019 17:47				CCV 240-395927/62 08/13/2019 18:15				CCV 240-395927/74 08/13/2019 18:44			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.1		50.0	102	51.6		50.0	103	51.6		50.0	103
Arsenic	49.1		50.0	98	48.3		50.0	97	50.0		50.0	100
Barium	49.3		50.0	99	49.8		50.0	100	50.6		50.0	101
Beryllium	50.1		50.0	100	49.3		50.0	99	49.2		50.0	98
Cadmium	49.8		50.0	100	50.1		50.0	100	50.3		50.0	101
Calcium	25500		25000	102	25500		25000	102	25600		25000	103
Chromium	50.1		50.0	100	50.2		50.0	100	49.8		50.0	100
Cobalt	49.8		50.0	100	48.8		50.0	98	50.1		50.0	100
Copper	49.9		50.0	100	49.7		50.0	99	50.3		50.0	101
Lead	49.7		50.0	99	50.2		50.0	100	50.0		50.0	100
Magnesium	25400		25000	101	24900		25000	100	25100		25000	101
Molybdenum	51.6		50.0	103	52.0		50.0	104	52.5		50.0	105
Nickel	49.7		50.0	99	49.3		50.0	99	50.1		50.0	100
Selenium	49.8		50.0	100	50.3		50.0	101	49.9		50.0	100
Silver	49.6		50.0	99	49.2		50.0	98	49.5		50.0	99
Thallium	47.6		50.0	95	48.3		50.0	97	48.3		50.0	97
Tungsten	50.2		50.0	100	50.5		50.0	101	50.8		50.0	102
Vanadium	49.8		50.0	100	49.9		50.0	100	49.5		50.0	99
Zinc	51.6		50.0	103	50.2		50.0	100	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.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: ICVLCCVLICPMS_00002 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00241

Analyte	CCV 240-395927/86 08/13/2019 19:13				CCV 240-395927/98 08/13/2019 19:41							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	51.0		50.0	102	51.5		50.0	103				
Arsenic	49.6		50.0	99	49.5		50.0	99				
Barium	49.6		50.0	99	50.1		50.0	100				
Beryllium	49.4		50.0	99	48.2		50.0	96				
Cadmium	50.3		50.0	101	50.1		50.0	100				
Calcium	25800		25000	103	25600		25000	102				
Chromium	49.7		50.0	99	49.5		50.0	99				
Cobalt	49.9		50.0	100	49.0		50.0	98				
Copper	49.9		50.0	100	49.8		50.0	100				
Lead	49.3		50.0	99	49.2		50.0	98				
Magnesium	25300		25000	101	25000		25000	100				
Molybdenum	52.4		50.0	105	52.2		50.0	104				
Nickel	50.1		50.0	100	49.1		50.0	98				
Selenium	50.1		50.0	100	51.0		50.0	102				
Silver	49.5		50.0	99	49.1		50.0	98				
Thallium	47.6		50.0	95	46.9		50.0	94				
Tungsten	50.4		50.0	101	49.1		50.0	98				
Vanadium	49.4		50.0	99	49.2		50.0	98				
Zinc	50.9		50.0	102	51.1		50.0	102				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: MTHgICV_00001_00555 Concentration Units: ug/L

CCV Source: MTHGCALW_02186

Analyte	ICV 240-395485/7-A 08/13/2019 08:41				CCV 240-395485/10-A 08/13/2019 11:30				CCV 240-395485/10-A 08/13/2019 11:55			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.97		5.00	99	5.46		5.00	109	5.30		5.00	106

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: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: MTHgICV_00001_00555 Concentration Units: ug/L

CCV Source: MTHGCALW_02186

Analyte	CCV 240-395485/10-A 08/13/2019 12:20				CCV 240-395485/10-A 08/13/2019 12:45				CCV 240-395485/10-A 08/13/2019 13:10			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.43		5.00	109	5.45		5.00	109	5.50		5.00	110

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICV Source: MTHgICV_00001_00555 Concentration Units: ug/L

CCV Source: MTHGCALW_02186

Analyte	CCV 240-395485/10-A 08/13/2019 13:35				CCV 240-395485/10-A 08/13/2019 13:49							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.39		5.00	108	5.42		5.00	108				

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: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Method: 7470A Instrument ID: H3

Lab Sample ID: CRA 240-395485/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_02186

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.212		106	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: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-395927/8 08/13/2019 16:08		CCB 240-395927/27 08/13/2019 16:53		CCB 240-395927/39 08/13/2019 17:21		CCB 240-395927/51 08/13/2019 17:50	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Tungsten	10	10	U	10	U	10	U	10	U
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-395927/63 08/13/2019 18:18		CCB 240-395927/75 08/13/2019 18:46		CCB 240-395927/87 08/13/2019 19:16		CCB 240-395927/99 08/13/2019 19:43	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Magnesium	1000	1000	U	1000	U	1000	U	1000	U
Molybdenum	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Tungsten	10	10	U	10	U	10	U	10	U
Vanadium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-395485/8-A 08/13/2019 08:43		CCB 240-395485/11-A 08/13/2019 11:32		CCB 240-395485/11-A 08/13/2019 11:57		CCB 240-395485/11-A 08/13/2019 12:22	
		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: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-395485/11-A 08/13/2019 12:47		CCB 240-395485/11-A 08/13/2019 13:12		CCB 240-395485/11-A 08/13/2019 13:37		CCB 240-395485/11-A 08/13/2019 13:51	
		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
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-395466/1-A

Instrument Code: I14 Batch No.: 395927

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	5.0	U		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	2.0	U		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	5.0	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	0.0980	J		6020
7440-28-0	Thallium	1.0	U		6020
7440-62-2	Vanadium	5.0	U		6020
7440-66-6	Zinc	20	U		6020
7440-70-2	Calcium	1000	U		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	10	U		6020

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-395472/1-A

Instrument Code: I14 Batch No.: 395927

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	5.0	U		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	2.0	U		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	5.0	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	0.106	J		6020
7440-28-0	Thallium	1.0	U		6020
7440-62-2	Vanadium	5.0	U		6020
7440-66-6	Zinc	20	U		6020
7440-70-2	Calcium	1000	U		6020
7439-95-4	Magnesium	1000	U		6020
7440-33-7	Tungsten	10	U		6020

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-395467/1-A

Instrument Code: H3 Batch No.: 395947

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-395473/1-A

Instrument Code: H3 Batch No.: 395947

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICSA 240-395927/10 Instrument ID: I14

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00092

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0880**	
Arsenic		**0.0190**	
Barium		**0.0800**	
Beryllium		**0.0080**	
Cadmium		**0.287**	
Calcium	**50000**	**49502**	**99**
Chromium		**-0.0100**	
Cobalt		**0.139**	
Copper		**0.0500**	
Lead		**0.0340**	
Magnesium	**50000**	**49406**	**99**
Molybdenum	**1000**	**1106**	**111**
Nickel		**0.0900**	
Selenium		**0.113**	
Silver		**0.0080**	
Thallium		**0.0000**	
Tungsten		**0.383**	
Vanadium		**0.0540**	
Zinc		**-0.397**	
Aluminum	*50000*	*49150*	*98*
Boron		*1.92*	
Iron	*50000*	*49930*	*100*
Lithium		*0.521*	
Manganese		*-0.198*	
Potassium	*50000*	*49630*	*99*
Sodium	*50000*	*50143*	*100*
Strontium		*0.406*	
Tin		*-0.0660*	
Titanium	*1000*	*1018*	*102*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Lab Sample ID: ICSAB 240-395927/11 Instrument ID: I14

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00091

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**104**	**104**
Arsenic	**100**	**99.8**	**100**
Barium	**100**	**103**	**103**
Beryllium	**100**	**103**	**103**
Cadmium	**100**	**103**	**103**
Calcium	**50000**	**48800**	**98**
Chromium	**100**	**102**	**102**
Cobalt	**100**	**102**	**102**
Copper	**100**	**101**	**101**
Lead	**100**	**104**	**104**
Magnesium	**50000**	**48522**	**97**
Molybdenum	**1100**	**1189**	**108**
Nickel	**100**	**101**	**101**
Selenium	**100**	**101**	**101**
Silver	**100**	**102**	**102**
Thallium	**100**	**102**	**102**
Tungsten	**100**	**104**	**104**
Vanadium	**100**	**101**	**101**
Zinc	**100**	**101**	**101**
Aluminum	*50000*	*48318*	*97*
Boron	*100*	*104*	*104*
Iron	*50000*	*48586*	*97*
Lithium	*100*	*105*	*105*
Manganese	*100*	*98.0*	*98*
Potassium	*50000*	*48678*	*97*
Sodium	*50000*	*49547*	*99*
Strontium	*100*	*99.7*	*100*
Tin	*100*	*104*	*104*
Titanium	*1100*	*1111*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW37A-080819 MS
Lab ID: 240-117170-1 MS
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	103		2.0	U	100	103	75-125		6020
Arsenic	972		2.2	J	1000	97	75-125		6020
Barium	1040		11		1000	103	75-125		6020
Beryllium	481		0.32	J	500	96	75-125		6020
Cadmium	475		1.0	U	500	95	75-125		6020
Chromium	485		2.0	U	500	97	75-125		6020
Cobalt	485		0.22	J	500	97	75-125		6020
Copper	488		4.9		500	97	75-125		6020
Lead	498		1.0	U	500	100	75-125		6020
Molybdenum	528		1.4	J	500	105	75-125		6020
Nickel	481		1.9	J	500	96	75-125		6020
Selenium	905		5.0	U	1000	90	75-125		6020
Silver	100		1.0	U	100	100	75-125		6020
Thallium	915		0.38	J	1000	91	75-125		6020
Vanadium	496		1.1	J	500	99	75-125		6020
Zinc	495		20	U	500	99	75-125		6020
Calcium	31100		7000		25000	96	75-125		6020
Magnesium	45800		22000		25000	93	75-125		6020
Tungsten	96.9		10	U	100	97	75-125		6020
Mercury	1.19		0.20	U	1.00	119	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW37A-080819 MSD

Lab ID: 240-117170-1 MSD

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	99.0		100	99	75-125	4	20		6020
Arsenic	955		1000	95	75-125	2	20		6020
Barium	993		1000	98	75-125	4	20		6020
Beryllium	465		500	93	75-125	3	20		6020
Cadmium	459		500	92	75-125	3	20		6020
Chromium	463		500	93	75-125	5	20		6020
Cobalt	479		500	96	75-125	1	20		6020
Copper	484		500	96	75-125	1	20		6020
Lead	485		500	97	75-125	3	20		6020
Molybdenum	527		500	105	75-125	0	20		6020
Nickel	474		500	94	75-125	1	20		6020
Selenium	877		1000	88	75-125	3	20		6020
Silver	97.3		100	97	75-125	3	20		6020
Thallium	898		1000	90	75-125	2	20		6020
Vanadium	478		500	95	75-125	4	20		6020
Zinc	487		500	97	75-125	2	20		6020
Calcium	30400		25000	93	75-125	2	20		6020
Magnesium	44200		25000	87	75-125	4	20		6020
Tungsten	92.9		100	93	75-125	4	20		6020
Mercury	1.08		1.00	108	80-120	10	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW42A-080819 MS
Lab ID: 240-117170-21 MS
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	105		2.0	U	100	105	75-125		6020
Arsenic	998		2.3	J	1000	100	75-125		6020
Barium	1050		12		1000	103	75-125		6020
Beryllium	492		1.0	U	500	98	75-125		6020
Cadmium	483		1.0	U	500	97	75-125		6020
Chromium	491		1.2	J	500	98	75-125		6020
Cobalt	499		0.25	J	500	100	75-125		6020
Copper	500		5.4		500	99	75-125		6020
Lead	517		1.0	U	500	103	75-125		6020
Molybdenum	546		1.5	J	500	109	75-125		6020
Nickel	504		2.0		500	100	75-125		6020
Selenium	923		5.0	U	1000	92	75-125		6020
Silver	102		1.0	U	100	102	75-125		6020
Thallium	947		0.38	J	1000	95	75-125		6020
Vanadium	501		1.2	J	500	100	75-125		6020
Zinc	505		20	U	500	101	75-125		6020
Calcium	31500		7200		25000	97	75-125		6020
Magnesium	47200		24000		25000	93	75-125		6020
Tungsten	97.5		10	U	100	98	75-125		6020
Mercury	1.24		0.20	U	1.00	124	80-120	F1	7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MSA-SW42A-080819 MSD
Lab ID: 240-117170-21 MSD
Lab Name: Eurofins TestAmerica, Canton
Job No.: 240-117170-1
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	105		100	105	75-125	0	20		6020
Arsenic	998		1000	100	75-125	0	20		6020
Barium	1040		1000	103	75-125	0	20		6020
Beryllium	487		500	97	75-125	1	20		6020
Cadmium	483		500	97	75-125	0	20		6020
Chromium	497		500	99	75-125	1	20		6020
Cobalt	504		500	101	75-125	1	20		6020
Copper	504		500	100	75-125	1	20		6020
Lead	509		500	102	75-125	1	20		6020
Molybdenum	544		500	108	75-125	0	20		6020
Nickel	501		500	100	75-125	1	20		6020
Selenium	928		1000	93	75-125	1	20		6020
Silver	102		100	102	75-125	0	20		6020
Thallium	937		1000	94	75-125	1	20		6020
Vanadium	506		500	101	75-125	1	20		6020
Zinc	507		500	101	75-125	1	20		6020
Calcium	32000		25000	99	75-125	2	20		6020
Magnesium	48400		25000	98	75-125	2	20		6020
Tungsten	97.8		100	98	75-125	0	20		6020
Mercury	1.13		1.00	113	80-120	9	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-395472/2-A

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

Sample Matrix: Water LCS Source: ICPMSspike3_00003

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	105		105	80	120		6020
Arsenic	1000	981		98	80	120		6020
Barium	1000	1050		105	80	120		6020
Beryllium	500	506		101	80	120		6020
Cadmium	500	496		99	80	120		6020
Chromium	500	506		101	80	120		6020
Cobalt	500	499		100	80	120		6020
Copper	500	501		100	80	120		6020
Lead	500	529		106	80	120		6020
Molybdenum	500	534		107	80	120		6020
Nickel	500	503		101	80	120		6020
Selenium	1000	933		93	80	120		6020
Silver	100	105		105	80	120		6020
Thallium	1000	965		97	80	120		6020
Vanadium	500	508		102	80	120		6020
Zinc	500	513		103	80	120		6020
Calcium	25000	25400		102	80	120		6020
Magnesium	25000	24500		98	80	120		6020
Tungsten	100	98.3		98	80	120		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-395466/2-A

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

Sample Matrix: Water LCS Source: ICPMSspike3_00003

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	105		105	80	120		6020
Arsenic	1000	966		97	80	120		6020
Barium	1000	1050		105	80	120		6020
Beryllium	500	509		102	80	120		6020
Cadmium	500	496		99	80	120		6020
Chromium	500	506		101	80	120		6020
Cobalt	500	496		99	80	120		6020
Copper	500	503		101	80	120		6020
Lead	500	527		105	80	120		6020
Molybdenum	500	533		107	80	120		6020
Nickel	500	495		99	80	120		6020
Selenium	1000	925		93	80	120		6020
Silver	100	104		104	80	120		6020
Thallium	1000	970		97	80	120		6020
Vanadium	500	509		102	80	120		6020
Zinc	500	509		102	80	120		6020
Calcium	25000	25300		101	80	120		6020
Magnesium	25000	24900		100	80	120		6020
Tungsten	100	96.5		96	80	120		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-395473/2-A

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

Sample Matrix: Water LCS Source: MTHGCALW_02186

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.39		108	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-395467/2-A

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

Sample Matrix: Water LCS Source: MTHGCALW_02186

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.39		108	80	120		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-117170-1

SDG No:

Lab Name: Eurofins TestAmerica, Canton Job No: 240-117170-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.0	U	10	U	NC		6020
Arsenic	2.2	J	25	U	NC		6020
Barium	11		25	U	NC		6020
Beryllium	0.32	J	5.0	U	NC		6020
Cadmium	1.0	U	5.0	U	NC		6020
Chromium	2.0	U	10	U	NC		6020
Cobalt	0.22	J	5.0	U	NC		6020
Copper	4.9		10	U	NC		6020
Lead	1.0	U	5.0	U	NC		6020
Molybdenum	1.4	J	25	U	NC		6020
Nickel	1.9	J	10	U	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.38	J	5.0	U	NC		6020
Vanadium	1.1	J	25	U	NC		6020
Zinc	20	U	100	U	NC		6020
Calcium	7000		7130		NC		6020
Magnesium	22000		23600		NC		6020
Tungsten	10	U	50	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 240-117170-21

SDG No:

Lab Name: Eurofins TestAmerica, Canton Job No: 240-117170-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.0	U	10	U	NC		6020
Arsenic	2.3	J	25	U	NC		6020
Barium	12		11.5	J	NC		6020
Beryllium	1.0	U	5.0	U	NC		6020
Cadmium	1.0	U	5.0	U	NC		6020
Chromium	1.2	J	10	U	NC		6020
Cobalt	0.25	J	5.0	U	NC		6020
Copper	5.4		10	U	NC		6020
Lead	1.0	U	5.0	U	NC		6020
Molybdenum	1.5	J	25	U	NC		6020
Nickel	2.0		10	U	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.38	J	5.0	U	NC		6020
Vanadium	1.2	J	25	U	NC		6020
Zinc	20	U	100	U	NC		6020
Calcium	7200		7290		NC		6020
Magnesium	24000		24500		NC		6020
Tungsten	10	U	50	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG Number:

Matrix: Water Instrument ID: I14

Method: 6020 MDL Date: 04/27/2017 13:23

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	5	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Tungsten	182.00	10	1.78
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG Number:

Matrix: Water Instrument ID: I14

Method: 6020 XMDL Date: 04/27/2017 13:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.57
Arsenic	75.00	5	0.75
Barium	137.00	5	2.23
Beryllium	9.00	1	0.305
Cadmium	111.00	1	0.212
Chromium	52.00	2	0.98
Cobalt	59.00	1	0.19
Copper	65.00	2	1.7
Lead	208.00	1	0.45
Molybdenum	95.00	5	1.08
Nickel	60.00	2	1.47
Selenium	78.00	5	0.89
Silver	107.00	1	0.053
Thallium	205.00	1	0.2
Tungsten	182.00	10	1.78
Vanadium	51.00	5	0.82
Zinc	66.00	20	15

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A MDL Date: 02/22/2017 15:12

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.13

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG Number:

Matrix: Water Instrument ID: H3

Method: 7470A XMDL Date: 02/22/2017 15:12

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.13

FORM IX - IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

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	

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

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: Eurofins TestAmerica, Canton Job No: 240-117170-1

SDG No.:

Instrument ID: I14 Date: 10/02/2018 11:17

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		200	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		2000	6020
Cadmium		4000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Lead		4000	6020
Molybdenum		2000	6020
Nickel		10000	6020
Selenium		10000	6020
Silver		300	6020
Thallium		2000	6020
Vanadium		10000	6020
Zinc		10000	6020
Tungsten		2500	6020

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-395466/1-A	08/12/2019 14:00	395466		50	50
LCS 240-395466/2-A	08/12/2019 14:00	395466		50	50
240-117170-1	08/12/2019 14:00	395466		50	50
240-117170-1 MS	08/12/2019 14:00	395466		50	50
240-117170-1 MSD	08/12/2019 14:00	395466		50	50
240-117170-2	08/12/2019 14:00	395466		50	50
240-117170-3	08/12/2019 14:00	395466		50	50
240-117170-4	08/12/2019 14:00	395466		50	50
240-117170-5	08/12/2019 14:00	395466		50	50
240-117170-6	08/12/2019 14:00	395466		50	50
240-117170-7	08/12/2019 14:00	395466		50	50
240-117170-8	08/12/2019 14:00	395466		50	50
240-117170-9	08/12/2019 14:00	395466		50	50
240-117170-10	08/12/2019 14:00	395466		50	50
240-117170-11	08/12/2019 14:00	395466		50	50
240-117170-12	08/12/2019 14:00	395466		50	50
240-117170-13	08/12/2019 14:00	395466		50	50
240-117170-14	08/12/2019 14:00	395466		50	50
240-117170-15	08/12/2019 14:00	395466		50	50
240-117170-16	08/12/2019 14:00	395466		50	50
240-117170-17	08/12/2019 14:00	395466		50	50
240-117170-18	08/12/2019 14:00	395466		50	50
240-117170-19	08/12/2019 14:00	395466		50	50
240-117170-20	08/12/2019 14:00	395466		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-395472/1-A	08/12/2019 14:00	395472		50	50
LCS 240-395472/2-A	08/12/2019 14:00	395472		50	50
240-117170-21	08/12/2019 14:00	395472		50	50
240-117170-21 MS	08/12/2019 14:00	395472		50	50
240-117170-21 MSD	08/12/2019 14:00	395472		50	50
240-117170-22	08/12/2019 14:00	395472		50	50
240-117170-23	08/12/2019 14:00	395472		50	50
240-117170-24	08/12/2019 14:00	395472		50	50
240-117170-25	08/12/2019 14:00	395472		50	50
240-117170-26	08/12/2019 14:00	395472		50	50
240-117170-27	08/12/2019 14:00	395472		50	50
240-117170-28	08/12/2019 14:00	395472		50	50
240-117170-29	08/12/2019 14:00	395472		50	50
240-117170-30	08/12/2019 14:00	395472		50	50
240-117170-31	08/12/2019 14:00	395472		50	50
240-117170-32	08/12/2019 14:00	395472		50	50
240-117170-33	08/12/2019 14:00	395472		50	50
240-117170-34	08/12/2019 14:00	395472		50	50
240-117170-35	08/12/2019 14:00	395472		50	50
240-117170-36	08/12/2019 14:00	395472		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-395467/1-A	08/12/2019 12:00	395467		50	50
LCS 240-395467/2-A	08/12/2019 12:00	395467		50	50
240-117170-1	08/12/2019 12:00	395467		50	50
240-117170-1 MS	08/12/2019 12:00	395467		50	50
240-117170-1 MSD	08/12/2019 12:00	395467		50	50
240-117170-2	08/12/2019 12:00	395467		50	50
240-117170-3	08/12/2019 12:00	395467		50	50
240-117170-4	08/12/2019 12:00	395467		50	50
240-117170-5	08/12/2019 12:00	395467		50	50
240-117170-6	08/12/2019 12:00	395467		50	50
240-117170-7	08/12/2019 12:00	395467		50	50
240-117170-8	08/12/2019 12:00	395467		50	50
240-117170-9	08/12/2019 12:00	395467		50	50
240-117170-10	08/12/2019 12:00	395467		50	50
240-117170-11	08/12/2019 12:00	395467		50	50
240-117170-12	08/12/2019 12:00	395467		50	50
240-117170-13	08/12/2019 12:00	395467		50	50
240-117170-14	08/12/2019 12:00	395467		50	50
240-117170-15	08/12/2019 12:00	395467		50	50
240-117170-16	08/12/2019 12:00	395467		50	50
240-117170-17	08/12/2019 12:00	395467		50	50
240-117170-18	08/12/2019 12:00	395467		50	50
240-117170-19	08/12/2019 12:00	395467		50	50
240-117170-20	08/12/2019 12:00	395467		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-395473/1-A	08/12/2019 12:00	395473		50	50
LCS 240-395473/2-A	08/12/2019 12:00	395473		50	50
240-117170-21	08/12/2019 12:00	395473		50	50
240-117170-21 MS	08/12/2019 12:00	395473		50	50
240-117170-21 MSD	08/12/2019 12:00	395473		50	50
240-117170-22	08/12/2019 12:00	395473		50	50
240-117170-23	08/12/2019 12:00	395473		50	50
240-117170-24	08/12/2019 12:00	395473		50	50
240-117170-25	08/12/2019 12:00	395473		50	50
240-117170-26	08/12/2019 12:00	395473		50	50
240-117170-27	08/12/2019 12:00	395473		50	50
240-117170-28	08/12/2019 12:00	395473		50	50
240-117170-29	08/12/2019 12:00	395473		50	50
240-117170-30	08/12/2019 12:00	395473		50	50
240-117170-31	08/12/2019 12:00	395473		50	50
240-117170-32	08/12/2019 12:00	395473		50	50
240-117170-33	08/12/2019 12:00	395473		50	50
240-117170-34	08/12/2019 12:00	395473		50	50
240-117170-35	08/12/2019 12:00	395473		50	50
240-117170-36	08/12/2019 12:00	395473		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: I14 Analysis Method: 6020

Start Date: 08/13/2019 15:52 End Date: 08/13/2019 22:42

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						
RINSE 240-395927/1			15:52																									
ICIS 240-395927/2			15:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD1 240-395927/3 IC	1		15:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD2 240-395927/4 IC	1		15:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD3 240-395927/5 IC	1		16:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD4 240-395927/6 IC	1		16:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICV 240-395927/7	1		16:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICB 240-395927/8	1		16:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
ICVL 240-395927/9	1		16:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSA 240-395927/10	1		16:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-395927/11	1		16:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-395927/12			16:18																									
CCB 240-395927/13			16:20																									
ZZZZZZ			16:23																									
ZZZZZZ			16:25																									
ZZZZZZ			16:27																									
ZZZZZZ			16:29																									
ZZZZZZ			16:32																									
ZZZZZZ			16:34																									
ZZZZZZ			16:36																									
CCV 240-395927/21			16:39																									
CCB 240-395927/22			16:41																									
CCVL 240-395927/23			16:44																									
ZZZZZZ			16:46																									
ZZZZZZ			16:48																									
CCV 240-395927/26	1		16:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/27	1		16:53	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
CCVL 240-395927/28			16:55																									
MB 240-395472/1-A	1	R	16:58	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
LCS 240-395472/2-A	1	R	17:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-117170-21	1	D	17:02	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-21 SD	5	D	17:05	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
ZZZZZZ			17:07																									
240-117170-21 MS	1	D	17:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-117170-21 MSD	1	D	17:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-117170-22	1	D	17:13	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-23	1	D	17:16	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
CCV 240-395927/38	1		17:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/39	1		17:21	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-24	1	D	17:23	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-25	1	D	17:25	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-26	1	D	17:28	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: I14 Analysis Method: 6020

Start Date: 08/13/2019 15:52 End Date: 08/13/2019 22:42

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						
240-117170-27	1	D	17:30	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-28	1	D	17:33	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-29	1	D	17:35	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-30	1	D	17:38	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-31	1	D	17:40	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-32	1	D	17:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-33	1	D	17:45	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
CCV 240-395927/50	1		17:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/51	1		17:50	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-34	1	D	17:52	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-35	1	D	17:54	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-36	1	D	17:57	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
ZZZZZZ			17:59																									
ZZZZZZ			18:02																									
MB 240-395466/1-A	1	R	18:04	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
LCS 240-395466/2-A	1	R	18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-117170-1	1	D	18:09	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-1 SD	5	D	18:11	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
ZZZZZZ			18:13																									
CCV 240-395927/62	1		18:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/63	1		18:18	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-1 MS	1	D	18:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-117170-1 MSD	1	D	18:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-117170-2	1	D	18:25	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-3	1	D	18:27	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-4	1	D	18:29	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-5	1	D	18:32	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-6	1	D	18:34	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-7	1	D	18:37	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-8	1	D	18:39	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-9	1	D	18:42	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
CCV 240-395927/74	1		18:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/75	1		18:46	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-10	1	D	18:49	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-11	1	D	18:51	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-12	1	D	18:54	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-13	1	D	18:56	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-14	1	D	18:59	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-15	1	D	19:01	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-16	1	D	19:03	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-17	1	D	19:06	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-18	1	D	19:08	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: I14 Analysis Method: 6020

Start Date: 08/13/2019 15:52 End Date: 08/13/2019 22:42

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						
240-117170-19	1	D	19:11	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
CCV 240-395927/86	1		19:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/87	1		19:16	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
240-117170-20	1	D	19:18	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
ZZZZZZ			19:20																									
ZZZZZZ			19:23																									
ZZZZZZ			19:25																									
ZZZZZZ			19:27																									
ZZZZZZ			19:30																									
ZZZZZZ			19:32																									
ZZZZZZ			19:34																									
ZZZZZZ			19:36																									
ZZZZZZ			19:38																									
CCV 240-395927/98	1		19:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-395927/99	1		19:43	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X						
ZZZZZZ			19:46																									
ZZZZZZ			19:48																									
ZZZZZZ			19:50																									
ZZZZZZ			19:53																									
ZZZZZZ			19:55																									
ZZZZZZ			19:57																									
ZZZZZZ			20:00																									
ZZZZZZ			20:02																									
ZZZZZZ			20:04																									
ZZZZZZ			20:07																									
CCV 240-395927/110			20:09																									
CCB 240-395927/111			20:11																									
ZZZZZZ			20:14																									
ZZZZZZ			20:16																									
ZZZZZZ			20:18																									
ZZZZZZ			20:21																									
ZZZZZZ			20:23																									
ZZZZZZ			20:25																									
ZZZZZZ			20:27																									
ZZZZZZ			20:29																									
ZZZZZZ			20:31																									
ZZZZZZ			20:34																									
CCV 240-395927/122			20:36																									
CCB 240-395927/123			20:38																									
ZZZZZZ			20:41																									
ZZZZZZ			20:43																									
ZZZZZZ			20:46																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: I14 Analysis Method: 6020

Start Date: 08/13/2019 15:52 End Date: 08/13/2019 22:42

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			20:48																									
ZZZZZZ			20:50																									
ZZZZZZ			20:53																									
ZZZZZZ			20:55																									
ZZZZZZ			20:57																									
ZZZZZZ			21:00																									
ZZZZZZ			21:02																									
CCV 240-395927/134			21:04																									
CCB 240-395927/135			21:07																									
ZZZZZZ			21:09																									
ZZZZZZ			21:12																									
ZZZZZZ			21:14																									
ZZZZZZ			21:16																									
CCV 240-395927/140			21:19																									
CCB 240-395927/141			21:21																									
CCVL 240-395927/142			21:23																									
ZZZZZZ			21:26																									
ZZZZZZ			21:28																									
ZZZZZZ			21:31																									
ZZZZZZ			21:33																									
ZZZZZZ			21:35																									
ZZZZZZ			21:37																									
ZZZZZZ			21:40																									
ZZZZZZ			21:42																									
ZZZZZZ			21:44																									
CCV 240-395927/152			21:47																									
CCB 240-395927/153			21:49																									
ZZZZZZ			21:51																									
ZZZZZZ			21:54																									
ZZZZZZ			21:56																									
ZZZZZZ			21:58																									
ZZZZZZ			22:00																									
ZZZZZZ			22:03																									
ZZZZZZ			22:05																									
ZZZZZZ			22:07																									
ZZZZZZ			22:09																									
ZZZZZZ			22:11																									
CCV 240-395927/164			22:14																									
CCB 240-395927/165			22:16																									
ZZZZZZ			22:19																									
ZZZZZZ			22:21																									
ZZZZZZ			22:23																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: I14 Analysis Method: 6020

Start Date: 08/13/2019 15:52 End Date: 08/13/2019 22:42

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			22:26																									
ZZZZZZ			22:28																									
ZZZZZZ			22:31																									
ZZZZZZ			22:33																									
ZZZZZZ			22:35																									
ZZZZZZ			22:38																									
CCV 240-395927/175			22:40																									
CCB 240-395927/176			22:42																									

Prep Types:
D = Dissolved
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 08/13/2019 08:28 End Date: 08/13/2019 13:51

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
IC 240-395485/1-A			08:28	X																							
IC 240-395485/2-A			08:30	X																							
IC 240-395485/3-A			08:32	X																							
IC 240-395485/4-A			08:34	X																							
IC 240-395485/5-A			08:36	X																							
IC 240-395485/6-A			08:38	X																							
ICV 240-395485/7-A	1		08:41	X																							
ICB 240-395485/8-A	1		08:43	X																							
CRA 240-395485/9-A	1		08:46	X																							
CCV 240-395485/10-A			08:48																								
CCB 240-395485/11-A			08:50																								
CCV 240-395485/10-A			08:52																								
CCB 240-395485/11-A			08:54																								
ZZZZZZ			09:52																								
ZZZZZZ			09:54																								
ZZZZZZ			09:56																								
ZZZZZZ			09:59																								
ZZZZZZ			10:01																								
ZZZZZZ			10:03																								
ZZZZZZ			10:05																								
ZZZZZZ			10:07																								
ZZZZZZ			10:11																								
ZZZZZZ			10:13																								
CCV 240-395485/10-A			10:15																								
CCB 240-395485/11-A			10:17																								
ZZZZZZ			10:19																								
ZZZZZZ			10:21																								
ZZZZZZ			10:23																								
ZZZZZZ			10:25																								
ZZZZZZ			10:27																								
ZZZZZZ			10:29																								
ZZZZZZ			10:31																								
ZZZZZZ			10:33																								
ZZZZZZ			10:35																								
ZZZZZZ			10:37																								
CCV 240-395485/10-A			10:39																								
CCB 240-395485/11-A			10:41																								
ZZZZZZ			10:44																								
ZZZZZZ			10:46																								
ZZZZZZ			10:48																								
ZZZZZZ			10:50																								
ZZZZZZ			10:52																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 08/13/2019 08:28 End Date: 08/13/2019 13:51

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
ZZZZZZ			10:54																								
ZZZZZZ			10:56																								
ZZZZZZ			10:58																								
ZZZZZZ			11:01																								
ZZZZZZ			11:03																								
CCV 240-395485/10-A			11:05																								
CCB 240-395485/11-A			11:07																								
ZZZZZZ			11:10																								
ZZZZZZ			11:12																								
ZZZZZZ			11:14																								
ZZZZZZ			11:16																								
ZZZZZZ			11:18																								
ZZZZZZ			11:20																								
ZZZZZZ			11:22																								
ZZZZZZ			11:24																								
ZZZZZZ			11:26																								
ZZZZZZ			11:28																								
CCV 240-395485/10-A	1		11:30	X																							
CCB 240-395485/11-A	1		11:32	X																							
ZZZZZZ			11:34																								
ZZZZZZ			11:36																								
ZZZZZZ			11:38																								
ZZZZZZ			11:40																								
ZZZZZZ			11:42																								
ZZZZZZ			11:44																								
ZZZZZZ			11:46																								
ZZZZZZ			11:48																								
ZZZZZZ			11:51																								
MB 240-395473/1-A	1	T	11:53	X																							
CCV 240-395485/10-A	1		11:55	X																							
CCB 240-395485/11-A	1		11:57	X																							
LCS 240-395473/2-A	1	T	11:59	X																							
240-117170-21	1	D	12:01	X																							
240-117170-21 MS	1	D	12:04	X																							
240-117170-21 MSD	1	D	12:06	X																							
240-117170-22	1	D	12:08	X																							
240-117170-23	1	D	12:10	X																							
240-117170-24	1	D	12:12	X																							
240-117170-25	1	D	12:14	X																							
240-117170-26	1	D	12:16	X																							
240-117170-27	1	D	12:18	X																							
CCV 240-395485/10-A	1		12:20	X																							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 08/13/2019 08:28 End Date: 08/13/2019 13:51

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
CCB 240-395485/11-A	1		12:22	X																							
240-117170-28	1	D	12:24	X																							
240-117170-29	1	D	12:26	X																							
240-117170-30	1	D	12:28	X																							
240-117170-31	1	D	12:30	X																							
240-117170-32	1	D	12:32	X																							
240-117170-33	1	D	12:34	X																							
240-117170-34	1	D	12:36	X																							
240-117170-35	1	D	12:39	X																							
240-117170-36	1	D	12:41	X																							
ZZZZZZ			12:43																								
CCV 240-395485/10-A	1		12:45	X																							
CCB 240-395485/11-A	1		12:47	X																							
ZZZZZZ			12:49																								
MB 240-395467/1-A	1	T	12:51	X																							
LCS 240-395467/2-A	1	T	12:53	X																							
240-117170-1	1	D	12:55	X																							
240-117170-1 MS	1	D	12:58	X																							
240-117170-1 MSD	1	D	13:00	X																							
240-117170-2	1	D	13:02	X																							
240-117170-3	1	D	13:04	X																							
240-117170-4	1	D	13:06	X																							
240-117170-5	1	D	13:08	X																							
CCV 240-395485/10-A	1		13:10	X																							
CCB 240-395485/11-A	1		13:12	X																							
240-117170-6	1	D	13:14	X																							
240-117170-7	1	D	13:16	X																							
240-117170-8	1	D	13:19	X																							
240-117170-9	1	D	13:21	X																							
240-117170-10	1	D	13:23	X																							
240-117170-11	1	D	13:25	X																							
240-117170-12	1	D	13:27	X																							
240-117170-13	1	D	13:29	X																							
240-117170-14	1	D	13:31	X																							
240-117170-15	1	D	13:33	X																							
CCV 240-395485/10-A	1		13:35	X																							
CCB 240-395485/11-A	1		13:37	X																							
240-117170-16	1	D	13:39	X																							
240-117170-17	1	D	13:41	X																							
240-117170-18	1	D	13:43	X																							
240-117170-19	1	D	13:45	X																							
240-117170-20	1	D	13:47	X																							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: H3 Analysis Method: 7470A

Start Date: 08/13/2019 08:28 End Date: 08/13/2019 13:51

Lab Sample Id	D/F	Type	Time	Analytes																							
				Hg																							
CCV 240-395485/10-A	1		13:49	X																							
CCB 240-395485/11-A	1		13:51	X																							

Prep Types:
D = Dissolved
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2340B

Start Date: 08/15/2019 08:44 End Date: 08/15/2019 09:24

Lab Sample Id	D/F	Type	Time	Analytes																							
				CaCO3	HardCC	MgHARD																					
ZZZZZZ			08:44																								
240-117170-1	1	D	08:44	X	X	X																					
240-117170-2	1	D	08:44	X	X	X																					
240-117170-3	1	D	08:44	X	X	X																					
240-117170-4	1	D	08:44	X	X	X																					
240-117170-5	1	D	08:44	X	X	X																					
240-117170-6	1	D	08:44	X	X	X																					
240-117170-7	1	D	08:44	X	X	X																					
240-117170-8	1	D	08:44	X	X	X																					
240-117170-9	1	D	08:44	X	X	X																					
240-117170-10	1	D	08:44	X	X	X																					
240-117170-11	1	D	08:44	X	X	X																					
240-117170-12	1	D	08:44	X	X	X																					
240-117170-13	1	D	08:44	X	X	X																					
240-117170-14	1	D	08:44	X	X	X																					
240-117170-15	1	D	08:44	X	X	X																					
240-117170-16	1	D	08:44	X	X	X																					
240-117170-17	1	D	08:44	X	X	X																					
240-117170-18	1	D	08:44	X	X	X																					
240-117170-19	1	D	08:44	X	X	X																					
240-117170-20	1	D	09:24	X	X	X																					
240-117170-21	1	D	09:24	X	X	X																					
240-117170-22	1	D	09:24	X	X	X																					
240-117170-23	1	D	09:24	X	X	X																					
240-117170-24	1	D	09:24	X	X	X																					
240-117170-25	1	D	09:24	X	X	X																					
240-117170-26	1	D	09:24	X	X	X																					
240-117170-27	1	D	09:24	X	X	X																					
240-117170-28	1	D	09:24	X	X	X																					
240-117170-29	1	D	09:24	X	X	X																					
240-117170-30	1	D	09:24	X	X	X																					
240-117170-31	1	D	09:24	X	X	X																					
240-117170-32	1	D	09:24	X	X	X																					
240-117170-33	1	D	09:24	X	X	X																					
240-117170-34	1	D	09:24	X	X	X																					
240-117170-35	1	D	09:24	X	X	X																					
240-117170-36	1	D	09:24	X	X	X																					
ZZZZZZ			09:24																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2340B

Start Date: 08/15/2019 08:44 End Date: 08/15/2019 09:24

Lab Sample Id	D/F	Type	Time	Analytes																								
				CaCO3	HardCC	MgHARD																						
ZZZZZZ			09:24																									
ZZZZZZ			09:24																									

Prep Types:
D = Dissolved

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICP-MS Instrument ID: I14 Start Date: 08/13/2019 End Date: 08/13/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Sc/3	Q	Element Rh/2	Q
STD1 240-395927/3 IC	15:56	98		99		103		101		98	
STD2 240-395927/4 IC	15:59	98		98		99		100		96	
STD3 240-395927/5 IC	16:01	94		98		99		100		93	
STD4 240-395927/6 IC	16:03	101		101		102		103		103	
ICV 240-395927/7	16:06	100		99		99		101		97	
ICB 240-395927/8	16:08	102		101		101		101		101	
ICVL 240-395927/9	16:11	102		101		103		102		102	
ICSA 240-395927/10	16:13	91		96		97		97		87	
ICSAB 240-395927/11	16:15	89		93		98		98		87	
CCV 240-395927/26	16:51	93		97		101		100		96	
CCB 240-395927/27	16:53	98		99		102		101		100	
MB 240-395472/1-A	16:58	104		105		106		104		106	
LCS 240-395472/2-A	17:00	94		100		102		99		96	
240-117170-21	17:02	92		100		101		100		96	
240-117170-21 SD	17:05	99		102		103		101		99	
240-117170-21 MS	17:09	93		100		99		98		93	
240-117170-21 MSD	17:11	92		101		101		97		93	
240-117170-22	17:13	99		102		102		101		96	
240-117170-23	17:16	102		102		102		101		97	
CCV 240-395927/38	17:18	100		102		102		99		98	
CCB 240-395927/39	17:21	102		103		103		101		103	
240-117170-24	17:23	99		103		101		100		96	
240-117170-25	17:25	100		104		103		100		96	
240-117170-26	17:28	102		104		101		101		96	
240-117170-27	17:30	100		103		102		101		95	
240-117170-28	17:33	99		103		102		100		94	
240-117170-29	17:35	101		104		102		101		96	
240-117170-30	17:38	100		103		102		102		95	
240-117170-31	17:40	101		104		102		101		96	
240-117170-32	17:42	93		99		99		99		92	
240-117170-33	17:45	100		102		104		101		96	
CCV 240-395927/50	17:47	102		102		103		100		97	
CCB 240-395927/51	17:50	105		103		103		101		103	
240-117170-34	17:52	98		103		103		101		96	
240-117170-35	17:54	100		104		102		101		96	
240-117170-36	17:57	101		103		103		101		96	
MB 240-395466/1-A	18:04	103		103		106		102		104	
LCS 240-395466/2-A	18:06	94		99		102		98		94	
240-117170-1	18:09	94		100		101		100		95	

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15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICP-MS Instrument ID: I14 Start Date: 08/13/2019 End Date: 08/13/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Sc/3	Q	Element Rh/2	Q
240-117170-1 SD	18:11	99		101		102		100		99	
CCV 240-395927/62	18:15	98		100		102		100		98	
CCB 240-395927/63	18:18	101		101		101		100		101	
240-117170-1 MS	18:20	93		100		101		97		93	
240-117170-1 MSD	18:22	93		101		102		99		94	
240-117170-2	18:25	101		104		105		101		99	
240-117170-3	18:27	101		104		104		101		98	
240-117170-4	18:29	99		103		103		101		96	
240-117170-5	18:32	97		102		102		101		95	
240-117170-6	18:34	100		103		102		101		96	
240-117170-7	18:37	101		103		104		101		97	
240-117170-8	18:39	101		103		104		101		97	
240-117170-9	18:42	100		102		103		101		96	
CCV 240-395927/74	18:44	101		103		102		101		98	
CCB 240-395927/75	18:46	103		102		103		101		105	
240-117170-10	18:49	100		103		103		101		96	
240-117170-11	18:51	96		102		102		101		96	
240-117170-12	18:54	101		103		103		101		96	
240-117170-13	18:56	101		104		103		101		98	
240-117170-14	18:59	101		102		103		100		97	
240-117170-15	19:01	100		103		104		101		97	
240-117170-16	19:03	98		103		103		100		97	
240-117170-17	19:06	103		103		103		102		95	
240-117170-18	19:08	100		104		102		101		97	
240-117170-19	19:11	98		104		103		101		97	
CCV 240-395927/86	19:13	102		103		104		100		100	
CCB 240-395927/87	19:16	103		104		105		101		105	
240-117170-20	19:18	100		104		103		102		98	
CCV 240-395927/98	19:41	104		106		105		102		102	
CCB 240-395927/99	19:43	103		107		104		103		107	

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15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICP-MS Instrument ID: I14 Start Date: 08/13/2019 End Date: 08/13/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Rh/3	Q	Element In/2	Q	Element In/3	Q	Element Tb	Q	Element Ho	Q
STD1 240-395927/3 IC	15:56	99		103		99		101		101	
STD2 240-395927/4 IC	15:59	96		98		97		100		99	
STD3 240-395927/5 IC	16:01	93		94		95		98		98	
STD4 240-395927/6 IC	16:03	101		102		102		103		102	
ICV 240-395927/7	16:06	96		98		98		101		100	
ICB 240-395927/8	16:08	101		103		102		101		101	
ICVL 240-395927/9	16:11	100		103		102		102		101	
ICSA 240-395927/10	16:13	91		94		93		98		98	
ICSAB 240-395927/11	16:15	94		97		93		99		99	
CCV 240-395927/26	16:51	96		99		97		100		99	
CCB 240-395927/27	16:53	100		103		100		101		100	
MB 240-395472/1-A	16:58	104		106		104		104		102	
LCS 240-395472/2-A	17:00	94		103		95		99		99	
240-117170-21	17:02	94		98		97		101		99	
240-117170-21 SD	17:05	98		102		100		102		101	
240-117170-21 MS	17:09	91		98		93		97		96	
240-117170-21 MSD	17:11	90		98		92		97		96	
240-117170-22	17:13	93		98		97		101		99	
240-117170-23	17:16	94		99		97		100		99	
CCV 240-395927/38	17:18	95		98		98		101		100	
CCB 240-395927/39	17:21	101		102		101		102		102	
240-117170-24	17:23	94		98		97		100		100	
240-117170-25	17:25	94		99		97		101		100	
240-117170-26	17:28	93		98		97		100		99	
240-117170-27	17:30	94		99		96		99		99	
240-117170-28	17:33	94		98		97		100		98	
240-117170-29	17:35	94		98		97		100		99	
240-117170-30	17:38	94		98		97		100		99	
240-117170-31	17:40	95		98		97		101		100	
240-117170-32	17:42	94		98		96		99		98	
240-117170-33	17:45	95		98		97		100		100	
CCV 240-395927/50	17:47	95		99		97		102		100	
CCB 240-395927/51	17:50	101		101		101		102		101	
240-117170-34	17:52	94		99		96		100		99	
240-117170-35	17:54	94		97		97		99		99	
240-117170-36	17:57	94		98		97		101		100	
MB 240-395466/1-A	18:04	103		105		102		104		103	
LCS 240-395466/2-A	18:06	94		102		94		99		98	
240-117170-1	18:09	93		99		97		100		99	

FORM XV - IN

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICP-MS Instrument ID: I14 Start Date: 08/13/2019 End Date: 08/13/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Rh/3	Q	Element In/2	Q	Element In/3	Q	Element Tb	Q	Element Ho	Q
240-117170-1 SD	18:11	97		102		98		101		100	
CCV 240-395927/62	18:15	96		99		97		99		99	
CCB 240-395927/63	18:18	100		102		101		101		100	
240-117170-1 MS	18:20	90		99		92		96		97	
240-117170-1 MSD	18:22	91		100		93		97		96	
240-117170-2	18:25	94		100		98		100		99	
240-117170-3	18:27	93		99		98		100		99	
240-117170-4	18:29	94		98		97		100		99	
240-117170-5	18:32	94		97		96		99		98	
240-117170-6	18:34	94		98		96		100		99	
240-117170-7	18:37	95		99		96		99		99	
240-117170-8	18:39	94		99		96		99		98	
240-117170-9	18:42	94		98		96		99		98	
CCV 240-395927/74	18:44	95		99		97		99		99	
CCB 240-395927/75	18:46	100		103		100		101		101	
240-117170-10	18:49	94		99		97		99		99	
240-117170-11	18:51	93		98		96		99		98	
240-117170-12	18:54	93		97		96		99		98	
240-117170-13	18:56	93		98		97		99		99	
240-117170-14	18:59	93		97		96		99		99	
240-117170-15	19:01	95		98		96		99		97	
240-117170-16	19:03	94		98		96		99		99	
240-117170-17	19:06	94		98		96		99		100	
240-117170-18	19:08	94		97		96		99		99	
240-117170-19	19:11	93		98		97		99		99	
CCV 240-395927/86	19:13	95		99		97		99		99	
CCB 240-395927/87	19:16	100		102		100		102		100	
240-117170-20	19:18	94		98		97		100		99	
CCV 240-395927/98	19:41	96		100		99		101		100	
CCB 240-395927/99	19:43	102		102		103		101		100	

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICP-MS Instrument ID: I14 Start Date: 08/13/2019 End Date: 08/13/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
STD1 240-395927/3 IC	15:56	100									
STD2 240-395927/4 IC	15:59	96									
STD3 240-395927/5 IC	16:01	93									
STD4 240-395927/6 IC	16:03	100									
ICV 240-395927/7	16:06	96									
ICB 240-395927/8	16:08	100									
ICVL 240-395927/9	16:11	101									
ICSA 240-395927/10	16:13	93									
ICSAB 240-395927/11	16:15	95									
CCV 240-395927/26	16:51	97									
CCB 240-395927/27	16:53	102									
MB 240-395472/1-A	16:58	104									
LCS 240-395472/2-A	17:00	95									
240-117170-21	17:02	93									
240-117170-21 SD	17:05	97									
240-117170-21 MS	17:09	89									
240-117170-21 MSD	17:11	89									
240-117170-22	17:13	93									
240-117170-23	17:16	94									
CCV 240-395927/38	17:18	97									
CCB 240-395927/39	17:21	101									
240-117170-24	17:23	93									
240-117170-25	17:25	93									
240-117170-26	17:28	94									
240-117170-27	17:30	93									
240-117170-28	17:33	93									
240-117170-29	17:35	93									
240-117170-30	17:38	94									
240-117170-31	17:40	94									
240-117170-32	17:42	92									
240-117170-33	17:45	93									
CCV 240-395927/50	17:47	96									
CCB 240-395927/51	17:50	102									
240-117170-34	17:52	93									
240-117170-35	17:54	93									
240-117170-36	17:57	92									
MB 240-395466/1-A	18:04	104									
LCS 240-395466/2-A	18:06	95									
240-117170-1	18:09	94									

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15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

ICP-MS Instrument ID: I14 Start Date: 08/13/2019 End Date: 08/13/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
240-117170-1 SD	18:11	98									
CCV 240-395927/62	18:15	95									
CCB 240-395927/63	18:18	101									
240-117170-1 MS	18:20	89									
240-117170-1 MSD	18:22	87									
240-117170-2	18:25	94									
240-117170-3	18:27	93									
240-117170-4	18:29	93									
240-117170-5	18:32	93									
240-117170-6	18:34	92									
240-117170-7	18:37	92									
240-117170-8	18:39	92									
240-117170-9	18:42	92									
CCV 240-395927/74	18:44	95									
CCB 240-395927/75	18:46	101									
240-117170-10	18:49	92									
240-117170-11	18:51	93									
240-117170-12	18:54	92									
240-117170-13	18:56	92									
240-117170-14	18:59	92									
240-117170-15	19:01	92									
240-117170-16	19:03	92									
240-117170-17	19:06	93									
240-117170-18	19:08	92									
240-117170-19	19:11	93									
CCV 240-395927/86	19:13	94									
CCB 240-395927/87	19:16	100									
240-117170-20	19:18	93									
CCV 240-395927/98	19:41	95									
CCB 240-395927/99	19:43	99									

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395466 Batch Start Date: 08/12/19 14:00 Batch Analyst: Loeb, Matthew R

Batch Method: 3005A Batch End Date: 08/12/19 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICPMSspike3 00003	MTTMHCL 00262	MTTMHNO3 00200	SPIKE1 00005
MB 240-395466/1		3005A, 6020		50 mL	50 mL		2.5 mL	1 mL	
LCS 240-395466/2		3005A, 6020		50 mL	50 mL	0.25 mL	2.5 mL	1 mL	0.25 mL
240-117170-D-1	MSA-SW37A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-1 MS	MSA-SW37A-080819	3005A, 6020	D	50 mL	50 mL	0.25 mL	2.5 mL	1 mL	0.25 mL
240-117170-D-1 MSD	MSA-SW37A-080819	3005A, 6020	D	50 mL	50 mL	0.25 mL	2.5 mL	1 mL	0.25 mL
240-117170-G-2	MSA-SW37B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-3	MSA-SW37C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-4	MSA-SW37D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-5	MSA-SW38A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-6	MSA-SW38B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-7	MSA-SW38C080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-8	MSA-SW38D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-9	MSA-SW39A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-10	MSA-SW39B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-E-11	MSA-SW39C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-12	MSA-SW39D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-13	MSA-SW40A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-14	MSA-SW40B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-15	MSA-SW40C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-16	MSA-SW40D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-17	MSA-SW41A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-18	MSA-SW41B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-19	MSA-SW41C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-20	MSA-SW41D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	SPIKE2 00003	TungstenSpike 00006				
MB 240-395466/1		3005A, 6020							
LCS 240-395466/2		3005A, 6020		0.25 mL	0.25 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395466 Batch Start Date: 08/12/19 14:00 Batch Analyst: Loeb, Matthew R

Batch Method: 3005A Batch End Date: 08/12/19 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	SPIKE2 00003	TungstenSpike 00006				
240-117170-D-1	MSA-SW37A-080819	3005A, 6020	D						
240-117170-D-1 MS	MSA-SW37A-080819	3005A, 6020	D	0.25 mL	0.25 mL				
240-117170-D-1 MSD	MSA-SW37A-080819	3005A, 6020	D	0.25 mL	0.25 mL				
240-117170-G-2	MSA-SW37B-080819	3005A, 6020	D						
240-117170-D-3	MSA-SW37C-080819	3005A, 6020	D						
240-117170-D-4	MSA-SW37D-080819	3005A, 6020	D						
240-117170-D-5	MSA-SW38A-080819	3005A, 6020	D						
240-117170-F-6	MSA-SW38B-080819	3005A, 6020	D						
240-117170-D-7	MSA-SW38C080819	3005A, 6020	D						
240-117170-D-8	MSA-SW38D-080819	3005A, 6020	D						
240-117170-D-9	MSA-SW39A-080819	3005A, 6020	D						
240-117170-F-10	MSA-SW39B-080819	3005A, 6020	D						
240-117170-E-11	MSA-SW39C-080819	3005A, 6020	D						
240-117170-D-12	MSA-SW39D-080819	3005A, 6020	D						
240-117170-D-13	MSA-SW40A-080819	3005A, 6020	D						
240-117170-F-14	MSA-SW40B-080819	3005A, 6020	D						
240-117170-D-15	MSA-SW40C-080819	3005A, 6020	D						
240-117170-D-16	MSA-SW40D-080819	3005A, 6020	D						
240-117170-D-17	MSA-SW41A-080819	3005A, 6020	D						
240-117170-F-18	MSA-SW41B-080819	3005A, 6020	D						
240-117170-D-19	MSA-SW41C-080819	3005A, 6020	D						
240-117170-D-20	MSA-SW41D-080819	3005A, 6020	D						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395466 Batch Start Date: 08/12/19 14:00 Batch Analyst: Loeb, Matthew R

Batch Method: 3005A Batch End Date: 08/12/19 22:00

Batch Notes	
Batch Comment	filter paper 81029102
Temperature - Corrected - End	Temp Log Degrees C
Temperature - Corrected - Start	Temp Log Degrees C
Digestion Unit ID	HB4
Pipette/Syringe/Dispenser ID	mp1
Thermometer ID	Temp Log
Digestion Tube/Cup ID	1902243
Temperature - Uncorrected - End	Temp Log Degrees C
Temperature - Uncorrected - Start	Temp Log Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395472 Batch Start Date: 08/12/19 14:00 Batch Analyst: Loeb, Matthew R

Batch Method: 3005A Batch End Date: 08/12/19 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICPMSspike3 00003	MTTMHCL 00262	MTTMHNO3 00200	SPIKE1 00005
MB 240-395472/1		3005A, 6020		50 mL	50 mL		2.5 mL	1 mL	
LCS 240-395472/2		3005A, 6020		50 mL	50 mL	0.25 mL	2.5 mL	1 mL	0.25 mL
240-117170-D-21	MSA-SW42A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-21 MS	MSA-SW42A-080819	3005A, 6020	D	50 mL	50 mL	0.25 mL	2.5 mL	1 mL	0.25 mL
240-117170-D-21 MSD	MSA-SW42A-080819	3005A, 6020	D	50 mL	50 mL	0.25 mL	2.5 mL	1 mL	0.25 mL
240-117170-G-22	MSA-SW42B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-23	MSA-SW42C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-24	MSA-SW42D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-25	MSA-SW43A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-26	MSA-SW43B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-27	MSA-SW43C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-28	MSA-SW43D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-29	MSA-SW44A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-30	MSA-SW44B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-31	MSA-SW44C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-32	MSA-SW44D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-33	MSA-SW45A-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-F-34	MSA-SW45B-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-35	MSA-SW45C-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	
240-117170-D-36	MSA-SW45D-080819	3005A, 6020	D	50 mL	50 mL		2.5 mL	1 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	SPIKE2 00003	TungstenSpike 00006				
MB 240-395472/1		3005A, 6020							
LCS 240-395472/2		3005A, 6020		0.25 mL	0.25 mL				
240-117170-D-21	MSA-SW42A-080819	3005A, 6020	D						
240-117170-D-21 MS	MSA-SW42A-080819	3005A, 6020	D	0.25 mL	0.25 mL				
240-117170-D-21 MSD	MSA-SW42A-080819	3005A, 6020	D	0.25 mL	0.25 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395472 Batch Start Date: 08/12/19 14:00 Batch Analyst: Loeb, Matthew R

Batch Method: 3005A Batch End Date: 08/12/19 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	SPIKE2 00003	TungstenSpike 00006				
240-117170-G-22	MSA-SW42B-080819	3005A, 6020	D						
240-117170-D-23	MSA-SW42C-080819	3005A, 6020	D						
240-117170-D-24	MSA-SW42D-080819	3005A, 6020	D						
240-117170-D-25	MSA-SW43A-080819	3005A, 6020	D						
240-117170-F-26	MSA-SW43B-080819	3005A, 6020	D						
240-117170-D-27	MSA-SW43C-080819	3005A, 6020	D						
240-117170-D-28	MSA-SW43D-080819	3005A, 6020	D						
240-117170-D-29	MSA-SW44A-080819	3005A, 6020	D						
240-117170-F-30	MSA-SW44B-080819	3005A, 6020	D						
240-117170-D-31	MSA-SW44C-080819	3005A, 6020	D						
240-117170-D-32	MSA-SW44D-080819	3005A, 6020	D						
240-117170-D-33	MSA-SW45A-080819	3005A, 6020	D						
240-117170-F-34	MSA-SW45B-080819	3005A, 6020	D						
240-117170-D-35	MSA-SW45C-080819	3005A, 6020	D						
240-117170-D-36	MSA-SW45D-080819	3005A, 6020	D						

Batch Notes	
Batch Comment	filter paper 81029102
Temperature - Corrected - End	Temp Log Degrees C
Temperature - Corrected - Start	Temp Log Degrees C
Digestion Unit ID	HB4
Pipette/Syringe/Dispenser ID	mp1
Thermometer ID	Temp Log
Digestion Tube/Cup ID	1902243
Temperature - Uncorrected - End	Temp Log Degrees C
Temperature - Uncorrected - Start	Temp Log Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395467 Batch Start Date: 08/12/19 12:00 Batch Analyst: Loeb, Matthew R

Batch Method: 7470A Batch End Date: 08/12/19 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00107	MTH2S04 00077	MTHGCALW 02186	MTKMN04W 00203
MB 240-395467/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-395467/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-117170-D-1	MSA-SW37A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-1 MS	MSA-SW37A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-117170-D-1 MSD	MSA-SW37A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-117170-G-2	MSA-SW37B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-3	MSA-SW37C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-4	MSA-SW37D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-5	MSA-SW38A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-6	MSA-SW38B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-7	MSA-SW38C080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-8	MSA-SW38D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-9	MSA-SW39A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-10	MSA-SW39B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-E-11	MSA-SW39C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-12	MSA-SW39D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-13	MSA-SW40A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-14	MSA-SW40B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-15	MSA-SW40C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-16	MSA-SW40D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-17	MSA-SW41A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-18	MSA-SW41B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-19	MSA-SW41C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-20	MSA-SW41D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00200					
MB 240-395467/1		7470A, 7470A		1.25 mL					
LCS 240-395467/2		7470A, 7470A		1.25 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395467 Batch Start Date: 08/12/19 12:00 Batch Analyst: Loeb, Matthew R

Batch Method: 7470A Batch End Date: 08/12/19 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00200					
240-117170-D-1	MSA-SW37A-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-1 MS	MSA-SW37A-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-1 MSD	MSA-SW37A-080819	7470A, 7470A	D	1.25 mL					
240-117170-G-2	MSA-SW37B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-3	MSA-SW37C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-4	MSA-SW37D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-5	MSA-SW38A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-6	MSA-SW38B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-7	MSA-SW38C080819	7470A, 7470A	D	1.25 mL					
240-117170-D-8	MSA-SW38D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-9	MSA-SW39A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-10	MSA-SW39B-080819	7470A, 7470A	D	1.25 mL					
240-117170-E-11	MSA-SW39C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-12	MSA-SW39D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-13	MSA-SW40A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-14	MSA-SW40B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-15	MSA-SW40C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-16	MSA-SW40D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-17	MSA-SW41A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-18	MSA-SW41B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-19	MSA-SW41C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-20	MSA-SW41D-080819	7470A, 7470A	D	1.25 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395467 Batch Start Date: 08/12/19 12:00 Batch Analyst: Loeb, Matthew R

Batch Method: 7470A Batch End Date: 08/12/19 14:00

Batch Notes	
Batch Comment	Take out temp in range
Temperature - Corrected - End	Temp Log Degrees C
Temperature - Corrected - Start	Temp Log Degrees C
Digestion Unit ID	c2
Pipette/Syringe/Dispenser ID	mp1 mp2
Thermometer ID	Temp Log
Digestion Tube/Cup ID	1902243
Temperature - Uncorrected - End	Temp Log Degrees C
Temperature - Uncorrected - Start	Temp Log Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395473 Batch Start Date: 08/12/19 12:00 Batch Analyst: Loeb, Matthew R

Batch Method: 7470A Batch End Date: 08/12/19 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00107	MTH2S04 00077	MTHGCALW 02186	MTKMN04W 00203
MB 240-395473/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-395473/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-117170-D-21	MSA-SW42A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-21 MS	MSA-SW42A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-117170-D-21 MSD	MSA-SW42A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL	0.5 mL	7.5 mL
240-117170-G-22	MSA-SW42B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-23	MSA-SW42C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-24	MSA-SW42D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-25	MSA-SW43A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-26	MSA-SW43B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-27	MSA-SW43C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-28	MSA-SW43D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-29	MSA-SW44A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-30	MSA-SW44B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-31	MSA-SW44C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-32	MSA-SW44D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-33	MSA-SW45A-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-F-34	MSA-SW45B-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-35	MSA-SW45C-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL
240-117170-D-36	MSA-SW45D-080819	7470A, 7470A	D	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00200					
MB 240-395473/1		7470A, 7470A		1.25 mL					
LCS 240-395473/2		7470A, 7470A		1.25 mL					
240-117170-D-21	MSA-SW42A-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-21 MS	MSA-SW42A-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-21 MSD	MSA-SW42A-080819	7470A, 7470A	D	1.25 mL					
240-117170-G-22	MSA-SW42B-080819	7470A, 7470A	D	1.25 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395473 Batch Start Date: 08/12/19 12:00 Batch Analyst: Loeb, Matthew R

Batch Method: 7470A Batch End Date: 08/12/19 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00200					
240-117170-D-23	MSA-SW42C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-24	MSA-SW42D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-25	MSA-SW43A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-26	MSA-SW43B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-27	MSA-SW43C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-28	MSA-SW43D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-29	MSA-SW44A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-30	MSA-SW44B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-31	MSA-SW44C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-32	MSA-SW44D-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-33	MSA-SW45A-080819	7470A, 7470A	D	1.25 mL					
240-117170-F-34	MSA-SW45B-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-35	MSA-SW45C-080819	7470A, 7470A	D	1.25 mL					
240-117170-D-36	MSA-SW45D-080819	7470A, 7470A	D	1.25 mL					

Batch Notes	
Batch Comment	Take out temp in range
Temperature - Corrected - End	Temp Log Degrees C
Temperature - Corrected - Start	Temp Log Degrees C
Digestion Unit ID	c1
Pipette/Syringe/Dispenser ID	mp1 mp2
Thermometer ID	Temp Log
Digestion Tube/Cup ID	1902243
Temperature - Uncorrected - End	Temp Log Degrees C
Temperature - Uncorrected - Start	Temp Log Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395485 Batch Start Date: 08/12/19 08:17 Batch Analyst: Nguyen, Diem

Batch Method: 7470A Batch End Date: 08/12/19 10:17

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00107	MTH2S04 00077	MTHGCALW 02186	MTHgICV_00001 00555
ICV 240-395485/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		2.5 mL
ICB 240-395485/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-395485/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-395485/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-395485/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00203	MTTMHNO3 00200				
ICV 240-395485/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-395485/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-395485/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-395485/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-395485/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Batch Comment	take out temp in range
Temperature - Corrected - End	temp log Degrees C
Temperature - Corrected - Start	temp log Degrees C
Digestion Unit ID	C1
Pipette/Syringe/Dispenser ID	MP1, MP2, A7, MP5
Thermometer ID	temp log
Digestion Tube/Cup ID	1902243
Temperature - Uncorrected - End	temp log Degrees C
Temperature - Uncorrected - Start	temp log Degrees C

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 395485 Batch Start Date: 08/12/19 08:17 Batch Analyst: Nguyen, Diem

Batch Method: 7470A Batch End Date: 08/12/19 10:17

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

US EPA Tune Check Report

Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\I14081319A.b
Acq. Date-Time	2019-08-13 09:38:02
Instrument Name	G8421A JP18131103

[No Gas]

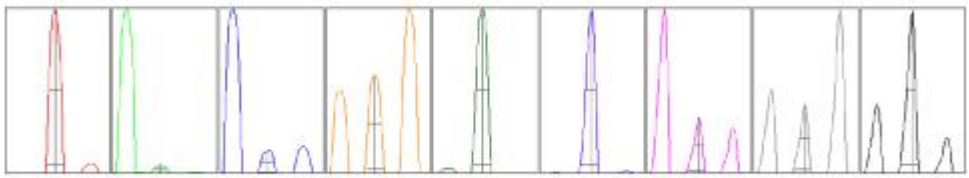
Sensitivity

Mass	Count	CPS	RSD%	RSD% (Required)	RSD% (Flag)
9	918	9176.24	0.867	5.000	
24	3403	34028.77	0.506	5.000	
25	440	4401.47	1.514	5.000	
26	531	5305.75	0.930	5.000	
59	5257	52568.59	0.480	5.000	
115	5611	56107.92	1.828	5.000	
206	670	6699.64	2.448	5.000	
207	548	5479.52	2.906	5.000	
208	1332	13324.01	2.462	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	916	912	913	931	916
24	3430	3409	3394	3387	3394
25	442	430	448	438	442
26	527	537	525	530	534
59	5272	5249	5220	5257	5287
115	5472	5600	5563	5687	5732
206	648	669	662	682	689
207	523	547	548	565	556
208	1290	1315	1326	1363	1368

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2496.55	8.95	8.90 - 9.10	
24	8587.38	23.90	23.90 - 24.10	
25	1130.87	24.90	24.90 - 25.10	
26	1368.99	25.90	25.90 - 26.10	
59	14533.25	58.95	58.90 - 59.10	
115	18076.25	115.00	114.90 - 115.10	

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
206	2353.50	206.00	205.90 - 206.10	
207	1952.80	207.00	206.90 - 207.10	
208	4726.55	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.38	0.489	0.850	
24	0.41	0.529	0.850	
25	0.39	0.526	0.850	
26	0.39	0.536	0.850	
59	0.36	0.533	0.850	
115	0.31	0.502	0.850	
206	0.27	0.505	0.850	
207	0.26	0.482	0.850	
208	0.26	0.519	0.850	

Integration Time [sec]	0.1
Acquisition Time [sec]	235
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	--	Nebulizer Gas	0.45 L/min	Dilution Gas	0.55 L/min
RF Power	1600 W	Option Gas	--	Auxiliary Gas	0.90 L/min
RF Matching	1.90 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.2 V	Deflect	13.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	--	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	126	Axis Gain	0.9995	QP Bias	-3.0 V
Mass Offset	133	Axis Offset	-0.07		

Hardware Settings

Torch

Torch H	0.2 mm	Torch V	0.0 mm

EM

Discriminator	4.2 mV	Analog HV	2190 V	Pulse HV	1421 V

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW42A-080819

Lab Sample ID: 240-117170-21

Lab Name: Eurofins TestAmerica, Canton

Job No.: 240-117170-1

SDG ID.:

Matrix: Water

Date Sampled: 08/08/2019 10:43

Reporting Basis: WET

Date Received: 08/09/2019 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.57	ug/L	U		1	6020
7440-38-2	Arsenic	2.3	5.0	0.75	ug/L	J		1	6020
7440-39-3	Barium	12	5.0	2.2	ug/L			1	6020
7440-41-7	Beryllium	1.0	1.0	0.31	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.21	ug/L	U		1	6020
7440-47-3	Chromium	1.2	2.0	0.98	ug/L	J		1	6020
7440-48-4	Cobalt	0.25	1.0	0.19	ug/L	J		1	6020
7440-50-8	Copper	5.4	2.0	1.7	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.45	ug/L	U		1	6020
7439-98-7	Molybdenum	1.5	5.0	1.1	ug/L	J		1	6020
7440-02-0	Nickel	2.0	2.0	1.5	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.89	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.053	ug/L	U		1	6020
7440-28-0	Thallium	0.38	1.0	0.20	ug/L	J		1	6020
7440-62-2	Vanadium	1.2	5.0	0.82	ug/L	J		1	6020
7440-66-6	Zinc	20	20	15	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	1.8	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.13	ug/L	U	F1	1	7470A

Sample Report

Sample Name	240-117170-d-21-a
File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\I14081319E.b
Acq Time	2019-08-13 17:02:41
Sample Type	Sample
Total Dilution	1.0000
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fial	Pass
ISTD QC Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	LDR	QC Flag
Li	7	6	No Gas	6.631	ug/l	1.6	84481.74	10000	
Be	9	45	No Gas	0.289	ug/l	15.9	683.36	2000	
B	11	45	No Gas	100.342	ug/l	0.6	163574.34	300	
Na	23	45	He	172587.872	ug/l	1.9	162655344.65	500000	
Mg	24	45	He	23957.150	ug/l	1.8	12230971.46	500000	
Al	27	45	He	54.184	ug/l	0.3	13034.91	200000	
K	39	45	He	8374.623	ug/l	1.9	4585230.51	500000	
Ca	44	45	He	7228.921	ug/l	1.7	95571.09	500000	
Ti	47	45	He	1.403	ug/l	5.1	241.12	2500	
V	51	45	He	1.161	ug/l	7.6	5353.93	10000	
Cr	52	45	He	1.180	ug/l	1.8	9181.96	10000	
Mn	55	45	He	70.841	ug/l	1.4	279006.86	10000	
Fe	56	103	He	105.422	ug/l	2.3	551407.86	200000	
Co	59	103	He	0.245	ug/l	10.0	2241.32	10000	
Ni	60	103	He	2.011	ug/l	6.8	4841.99	10000	
Cu	63	103	He	5.429	ug/l	3.0	32901.78	10000	
Zn	66	103	He	7.641	ug/l	3.5	10048.14	10000	
As	75	103	He	2.257	ug/l	6.8	2089.13	10000	
Se	78	115	H2	0.695	ug/l	6.4	256.67	10000	
Sr	88	103	He	143.165	ug/l	1.9	771065.45	10000	
Mo	95	103	He	1.517	ug/l	3.9	4867.58	2000	
Ag	107	103	He	0.015	ug/l	71.8	190.00	100	
Cd	111	115	He	0.095	ug/l	42.9	176.33	4000	
Sn	118	115	He	1.838	ug/l	6.5	8413.81	2000	
Sb	123	115	He	0.497	ug/l	11.3	2197.99	200	
Ba	137	115	He	11.525	ug/l	3.7	21404.94	10000	
W	182	159	He	1.250	ug/l	25.9	21238.68	2500	
Tl	205	165	He	0.380	ug/l	26.8	6642.97	2000	
Pb	208	165	He	0.348	ug/l	14.9	8244.46	4000	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li6	6	No Gas	613981.47	1.1	665616.65	92.24	59.5	120.4	
Sc	45	No Gas	4533173.15	1.7	4540384.82	99.84	59.5	120.4	
Sc	45	H2	3391078.17	2.5	3351533.25	101.18	59.5	120.4	
Sc	45	He	750467.35	3.4	747451.66	100.4	59.5	120.4	
Rh	103	H2	659683.27	3.2	685930.77	96.17	59.5	120.4	

Sample Report

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Rh	103	He	3171343.14	4.1	3380308.27	93.82	59.5	120.4	
In	115	H2	2018339.71	1.5	2069004.04	97.55	59.5	120.4	
In	115	He	930104.22	4.6	963701.7	96.51	59.5	120.4	
Tb	159	He	2178555.75	3.3	2167569.92	100.51	59.5	120.4	
Ho	165	He	4164686.64	3.2	4204260.81	99.06	59.5	120.4	
Bi	209	He	1312912.93	3.3	1408616.33	93.21	59.5	120.4	

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG No.:

Project: MSA Surface Water

Client Sample ID	Lab Sample ID
MSA-SW37B-080819	240-117170-2
MSA-SW38B-080819	240-117170-6
MSA-SW39B-080819	240-117170-10
MSA-SW40B-080819	240-117170-14
MSA-SW41B-080819	240-117170-18
MSA-SW42B-080819	240-117170-22
MSA-SW43B-080819	240-117170-26
MSA-SW44B-080819	240-117170-30
MSA-SW45B-080819	240-117170-34

Comments:

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Analyst: TPH Batch Start Date: 08/13/2019

Reporting Units: mg/L Analytical Batch No.: 396106

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	CCVL	06:37	Dissolved Organic Carbon	4.61	5.00	92	90-110		WC TOC CCVL_00267
3	CCB	06:43	Dissolved Organic Carbon	1.0				U	
14	CCVL	10:56	Dissolved Organic Carbon	4.67	5.00	93	90-110		WC TOC CCVL_00267
15	CCB	11:07	Dissolved Organic Carbon	1.0				U	
23	CCVL	14:22	Dissolved Organic Carbon	4.73	5.00	95	90-110		WC TOC CCVL_00267
24	CCB	14:33	Dissolved Organic Carbon	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 396106	Date: 08/13/2019 06:58						
9060	MB 240-396106/4	Dissolved Organic Carbon	1.0	U	mg/L	1.0	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 396106 Date: 08/13/2019 07:51											
9060	240-117170-2	Dissolved Organic Carbon	3.7		mg/L						
9060	240-117170-2 MS	Dissolved Organic Carbon	8.88		mg/L	5.00	103	65-134			
Batch ID: 396106 Date: 08/13/2019 12:56											
9060	240-117170-34	Dissolved Organic Carbon	3.4		mg/L						
9060	240-117170-34 MS	Dissolved Organic Carbon	8.17		mg/L	5.00	96	65-134			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 396106 Date: 08/13/2019 08:01											
9060	240-117170-2 MSD	Dissolved Organic Carbon	8.90		mg/L	5.00	103	65-134	0	10	
Batch ID: 396106 Date: 08/13/2019 13:06											
9060	240-117170-34 MSD	Dissolved Organic Carbon	8.27		mg/L	5.00	98	65-134	1	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

7A-IN
LOW LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 396106	Date: 08/13/2019 07:04										
						LCS Source: WC LCS_00084					
9060	LLCS 240-396106/5	Dissolved Organic Carbon	6.03		mg/L	6.75	89	88-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG Number:

Matrix: Water Instrument ID: Clark

Method: 9060 MDL Date: 04/25/2017 15:02

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Dissolved Organic Carbon		1	0.141

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-117170-1

SDG Number:

Matrix: Water Instrument ID: Clark

Method: 9060 XMDL Date: 04/25/2017 15:02

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon		1	0.141

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Instrument ID: Clark Analysis Method: 9060

Start Date: 08/13/2019 05:49 End Date: 08/13/2019 14:36

Lab Sample Id	D/F	Type	Time	Analytes																							
				DOC																							
ZZZZZZ			05:49																								
CCVL 240-396106/2	1		06:37	X																							
CCB 240-396106/3	1		06:43	X																							
MB 240-396106/4	1	D	06:58	X																							
LLCS 240-396106/5	1	D	07:04	X																							
240-117170-2	1	D	07:20	X																							
240-117170-2 MS	2	D	07:51	X																							
240-117170-2 MSD	2	D	08:01	X																							
240-117170-6	1	D	08:13	X																							
240-117170-10	1	D	08:45	X																							
240-117170-14	1	D	09:18	X																							
240-117170-18	1	D	09:51	X																							
240-117170-22	1	D	10:24	X																							
CCVL 240-396106/14	1		10:56	X																							
CCB 240-396106/15	1		11:07	X																							
240-117170-26	1	D	11:18	X																							
240-117170-30	1	D	11:50	X																							
240-117170-34	1	D	12:23	X																							
240-117170-34 MS	2	D	12:56	X																							
240-117170-34 MSD	2	D	13:06	X																							
ZZZZZZ			13:17																								
ZZZZZZ			13:49																								
CCVL 240-396106/23	1		14:22	X																							
CCB 240-396106/24	1		14:33	X																							
ZZZZZZ			14:36																								

Prep Types:
D = Dissolved

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 396106 Batch Start Date: 08/13/19 05:49 Batch Analyst: Harshman, Tom

Batch Method: 9060 Batch End Date: 08/13/19 14:36

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC LCS 00084	WC TOC CCVL 00267		
CCVL 240-396106/2		9060		40 mL	40 mL		40 mL		
CCB 240-396106/3		9060		40 mL	40 mL				
MB 240-396106/4		9060		40 mL	40 mL				
LLCS 240-396106/5		9060		40 mL	40 mL	10 mL			
240-117170-D-2	MSA-SW37B-080819	9060	D	40 mL	40 mL				
240-117170-D-2 MS	MSA-SW37B-080819	9060	D	40 mL	40 mL		20 mL		
240-117170-D-2 MSD	MSA-SW37B-080819	9060	D	40 mL	40 mL		20 mL		
240-117170-E-6	MSA-SW38B-080819	9060	D	40 mL	40 mL				
240-117170-E-10	MSA-SW39B-080819	9060	D	40 mL	40 mL				
240-117170-E-14	MSA-SW40B-080819	9060	D	40 mL	40 mL				
240-117170-E-18	MSA-SW41B-080819	9060	D	40 mL	40 mL				
240-117170-D-22	MSA-SW42B-080819	9060	D	40 mL	40 mL				
CCVL 240-396106/14		9060		40 mL	40 mL		40 mL		
CCB 240-396106/15		9060		40 mL	40 mL				
240-117170-E-26	MSA-SW43B-080819	9060	D	40 mL	40 mL				
240-117170-E-30	MSA-SW44B-080819	9060	D	40 mL	40 mL				
240-117170-E-34	MSA-SW45B-080819	9060	D	40 mL	40 mL				
240-117170-E-34 MS	MSA-SW45B-080819	9060	D	40 mL	40 mL		20 mL		
240-117170-E-34 MSD	MSA-SW45B-080819	9060	D	40 mL	40 mL		20 mL		
CCVL 240-396106/23		9060		40 mL	40 mL		40 mL		
CCB 240-396106/24		9060		40 mL	40 mL				

Batch Notes	
Phosphoric Acid ID	4238225
Sodium Persulfate ID	4238226

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-117170-1

SDG No.:

Batch Number: 396106 Batch Start Date: 08/13/19 05:49 Batch Analyst: Harshman, Tom

Batch Method: 9060 Batch End Date: 08/13/19 14:36

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **S. BRENNER** **DATE:** **SEPTEMBER 27, 2019**

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

SUBJECT: **INORGANIC DATA VALIDATION – HEXAVALENT CHROMIUM**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
FROG MORTAR CREEK
SAMPLE DELIVERY GROUP (SDG) TLG-042

SAMPLES: 36/Aqueous/Hexavalent Chromium

MSA-SW37A-080819	MSA-SW37B-080819	MSA-SW37C-080819
MSA-SW37D-080819	MSA-SW38A-080819	MSA-SW38B-080819
MSA-SW38C-080819	MSA-SW38D-080819	MSA-SW39A-080819
MSA-SW39B-080819	MSA-SW39C-080819	MSA-SW39D-080819
MSA-SW40A-080819	MSA-SW40B-080819	MSA-SW40C-080819
MSA-SW40D-080819	MSA-SW41A-080819	MSA-SW41B-080819
MSA-SW41C-080819	MSA-SW41D-080819	MSA-SW42A-080819
MSA-SW42B-080819	MSA-SW42C-080819	MSA-SW42D-080819
MSA-SW43A-080819	MSA-SW43B-080819	MSA-SW43C-080819
MSA-SW43D-080819	MSA-SW44A-080819	MSA-SW44B-080819
MSA-SW44C-080819	MSA-SW44D-080819	MSA-SW45A-080819
MSA-SW45B-080819	MSA-SW45C-080819	MSA-SW45D-080819

Overview

The sample set for LMC – MSA Frog Mortar Creek, SDG TLG-042 consisted of thirty-six (36) aqueous environmental samples. All thirty-six (36) aqueous samples were analyzed for hexavalent chromium. No field duplicate pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on March 5, 2019 and analyzed by ALS Environmental. All analyses were conducted in accordance with EPA Method 218.6 analytical and reporting protocols.

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

Major

No major issues were identified.

Minor

No minor issues were identified.

Notes

All samples were analyzed within the 24-hour holding time. No action was taken for the samples analyzed minutes over 24 hours (< 30 minutes).

All samples were properly preserved to a pH of 9.0 – 9.5.

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

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: None.

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

Michelle L. Woeber

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

Joseph A. Samchuck

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

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

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted detection limit.
J	The result is an estimated value with an unknown bias. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

Appendix A

Qualified Analytical Results

Qualifier Codes:

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

PROJ_NO: 08735	NSAMPLE	MSA-SW37A-080819			MSA-SW37B-080819			MSA-SW37C-080819			MSA-SW37D-080819		
SDG: TLG-042	LAB_ID	3050570001			3050570002			3050570003			3050570004		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW38A-080819			MSA-SW38B-080819			MSA-SW38C-080819			MSA-SW38D-080819		
SDG: TLG-042	LAB_ID	3050570005			3050570006			3050570007			3050570008		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW39A-080819			MSA-SW39B-080819			MSA-SW39C-080819			MSA-SW39D-080819		
SDG: TLG-042	LAB_ID	3050570009			3050570010			3050570011			3050570012		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW40A-080819			MSA-SW40B-080819			MSA-SW40C-080819			MSA-SW40D-080819		
SDG: TLG-042	LAB_ID	3050570013			3050570014			3050570015			3050570016		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW41A-080819			MSA-SW41B-080819			MSA-SW41C-080819			MSA-SW41D-080819		
SDG: TLG-042	LAB_ID	3050570017			3050570018			3050570019			3050570020		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW42A-080819			MSA-SW42B-080819			MSA-SW42C-080819			MSA-SW42D-080819		
SDG: TLG-042	LAB_ID	3050570021			3050570022			3050570023			3050570024		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW43A-080819			MSA-SW43B-080819			MSA-SW43C-080819			MSA-SW43D-080819		
SDG: TLG-042	LAB_ID	3050570025			3050570026			3050570027			3050570028		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW44A-080819			MSA-SW44B-080819			MSA-SW44C-080819			MSA-SW44D-080819		
SDG: TLG-042	LAB_ID	3050570029			3050570030			3050570031			3050570032		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

PROJ_NO: 08735	NSAMPLE	MSA-SW45A-080819			MSA-SW45B-080819			MSA-SW45C-080819			MSA-SW45D-080819		
SDG: TLG-042	LAB_ID	3050570033			3050570034			3050570035			3050570036		
FRACTION: MISC	SAMP_DATE	8/8/2019			8/8/2019			8/8/2019			8/8/2019		
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		0.047	U		0.047	U		0.047	U		0.047	U	

Appendix B

Results as Reported by the Laboratory

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570001** Date Collected: 8/8/2019 11:02 Matrix: Water

Sample ID: **MSA-SW37A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 11:01	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570002** Date Collected: 8/8/2019 11:06 Matrix: Water

Sample ID: **MSA-SW37B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 11:09	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570003** Date Collected: 8/8/2019 11:11 Matrix: Water

Sample ID: **MSA-SW37C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 11:17	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570004** Date Collected: 8/8/2019 11:15 Matrix: Water

Sample ID: **MSA-SW37D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 11:24	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570005** Date Collected: 8/8/2019 10:01 Matrix: Water

Sample ID: **MSA-SW38A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 08:44	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570006** Date Collected: 8/8/2019 10:05 Matrix: Water

Sample ID: **MSA-SW38B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:07	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570007** Date Collected: 8/8/2019 10:10 Matrix: Water

Sample ID: **MSA-SW38C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:15	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570008** Date Collected: 8/8/2019 10:15 Matrix: Water

Sample ID: **MSA-SW38D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:22	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570009** Date Collected: 8/8/2019 08:11 Matrix: Water

Sample ID: **MSA-SW39A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 04:56	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570010** Date Collected: 8/8/2019 08:18 Matrix: Water

Sample ID: **MSA-SW39B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 05:19	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570011** Date Collected: 8/8/2019 08:24 Matrix: Water

Sample ID: **MSA-SW39C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 05:27	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570012** Date Collected: 8/8/2019 08:31 Matrix: Water

Sample ID: **MSA-SW39D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 05:34	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570013** Date Collected: 8/8/2019 10:23 Matrix: Water

Sample ID: **MSA-SW40A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:30	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570014** Date Collected: 8/8/2019 10:26 Matrix: Water

Sample ID: **MSA-SW40B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:38	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570015** Date Collected: 8/8/2019 10:31 Matrix: Water

Sample ID: **MSA-SW40C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:45	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570016** Date Collected: 8/8/2019 10:35 Matrix: Water

Sample ID: **MSA-SW40D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 09:53	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570017** Date Collected: 8/8/2019 09:37 Matrix: Water

Sample ID: **MSA-SW41A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:44	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570018** Date Collected: 8/8/2019 09:40 Matrix: Water

Sample ID: **MSA-SW41B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:51	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570019** Date Collected: 8/8/2019 09:46 Matrix: Water

Sample ID: **MSA-SW41C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:59	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570020** Date Collected: 8/8/2019 09:49 Matrix: Water

Sample ID: **MSA-SW41D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 08:06	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570021** Date Collected: 8/8/2019 10:43 Matrix: Water

Sample ID: **MSA-SW42A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 10:00	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570022** Date Collected: 8/8/2019 10:47 Matrix: Water

Sample ID: **MSA-SW42B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 10:08	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570023** Date Collected: 8/8/2019 10:52 Matrix: Water

Sample ID: **MSA-SW42C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 10:31	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570024** Date Collected: 8/8/2019 10:56 Matrix: Water

Sample ID: **MSA-SW42D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 10:54	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570025** Date Collected: 8/8/2019 09:16 Matrix: Water

Sample ID: **MSA-SW43A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:13	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570026** Date Collected: 8/8/2019 09:20 Matrix: Water

Sample ID: **MSA-SW43B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:21	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570027** Date Collected: 8/8/2019 09:23 Matrix: Water

Sample ID: **MSA-SW43C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:28	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570028** Date Collected: 8/8/2019 09:26 Matrix: Water

Sample ID: **MSA-SW43D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:36	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570029** Date Collected: 8/8/2019 08:56 Matrix: Water

Sample ID: **MSA-SW44A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 06:12	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570030** Date Collected: 8/8/2019 09:01 Matrix: Water

Sample ID: **MSA-SW44B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 06:35	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570031** Date Collected: 8/8/2019 09:05 Matrix: Water

Sample ID: **MSA-SW44C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 06:43	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570032** Date Collected: 8/8/2019 09:09 Matrix: Water

Sample ID: **MSA-SW44D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 07:06	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570033** Date Collected: 8/8/2019 08:37 Matrix: Water

Sample ID: **MSA-SW45A-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 05:42	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570034** Date Collected: 8/8/2019 08:40 Matrix: Water

Sample ID: **MSA-SW45B-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 05:49	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570035** Date Collected: 8/8/2019 08:47 Matrix: Water

Sample ID: **MSA-SW45C-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 05:57	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

ALS Environmental

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ANALYTICAL RESULTS

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID: **3050570036** Date Collected: 8/8/2019 08:49 Matrix: Water

Sample ID: **MSA-SW45D-080819** Date Received: 8/8/2019 21:45

Parameters	Results	Flag	Units	RDL	MDL	Method	Prepared By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Hexavalent Chromium	ND		ug/L	0.25	0.047	EPA 218.6		8/9/19 06:05	MBW	A

Vanessa N. Badman

Mrs. Vanessa N Badman
Project Coordinator

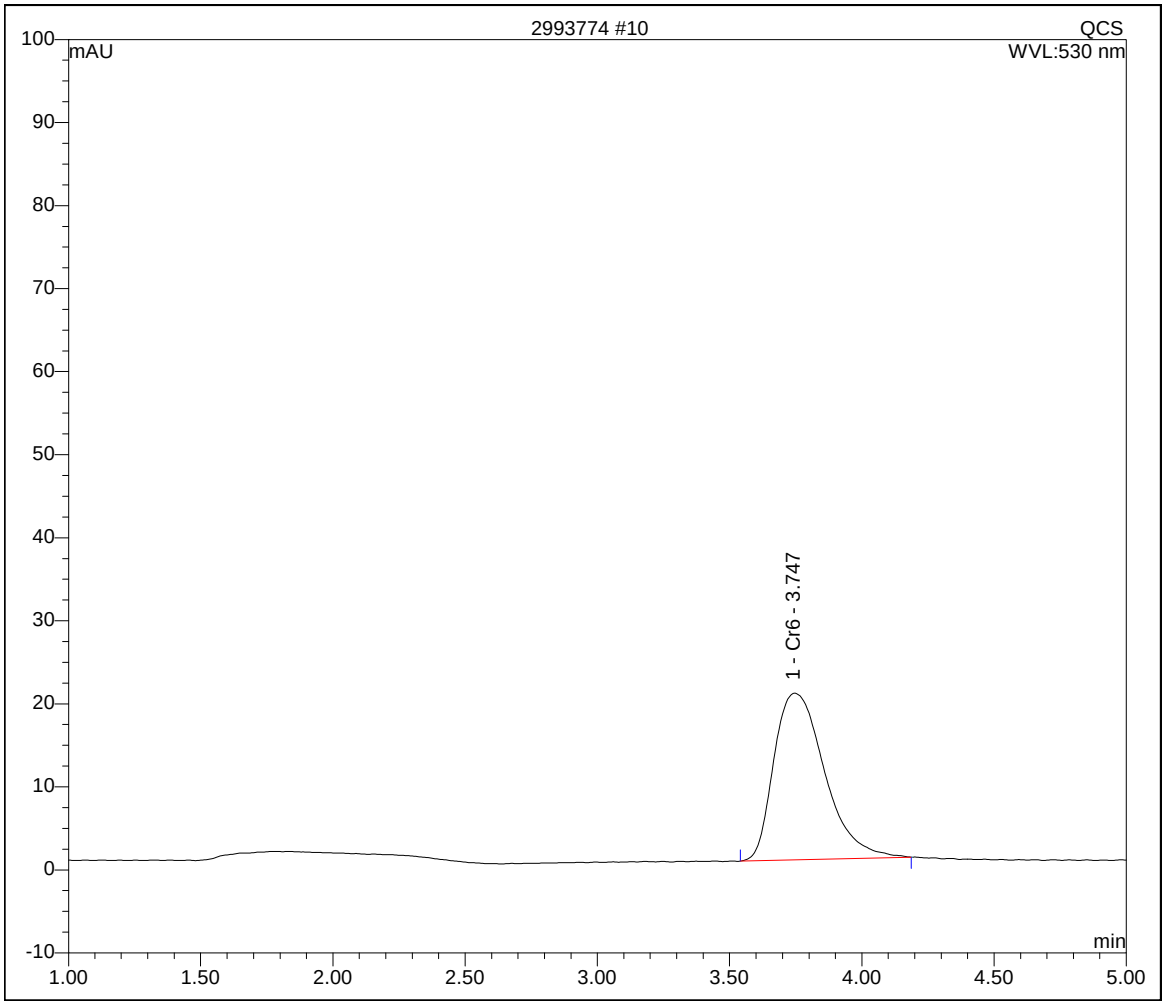
Appendix C

Support Documentation

Peak Integration Report

Sample Name:	**2993774**	*Dilution:*	**1**
Sample Type:	**LCS**	*Analyst:*	**MBW**
Program:	**cr+6 AS40**	*Queue:*	**WETC**
Inj. Date/Time:	**08/09/19 04:49**	*Batch:*	**225881**
Instrument:	**IC-4**	*Comment:*	
Sequence1:	**080919**	*InitialCal:*	**080919**
Sequence2:		*Method:*	**218_6_080919**

No.	Time min	Peak Name	Area mAU*min	Height mAU	Amount
1	3.75	Cr6	4.471	20.067	9.86
		TOTAL:	4.47	20.07	9.86



Middletown

34 Dogwood Lane
Middletown, PA

Chain of Custody Record

3050570

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Vanessa Badman	Carrier: Fedex	1 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below. 24 HR HOLD TIME			
(301) 528-3000 FAX	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day Standard			SDG No.
Project Name: MSA Surface Water Sampling				
Site: MSA Frog Mortar Creek				Sampler: S. Larson / W. Pryor
Project # 112IC08735				

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium (218.6)	Sample Specific Notes:
MSA-SW37A-080819	8/8/2019	1102	SW	Water	1	x	x	
MSA-SW37B-080819	8/8/2019	1106	SW	Water	1	x	x	
MSA-SW37C-080819	8/8/2019	1111	SW	Water	1	x	x	
MSA-SW37D-080819	8/8/2019	1115	SW	Water	1	x	x	
MSA-SW38A-080819	8/8/2019	1001	SW	Water	1	x	x	
MSA-SW38B-080819	8/8/2019	1005	SW	Water	1	x	x	
MSA-SW38C-080819	8/8/2019	1010	SW	Water	1	x	x	
MSA-SW38D-080819	8/8/2019	1015	SW	Water	1	x	x	
MSA-SW39A-080819	8/8/2019	0811	SW	Water	1	x	x	
MSA-SW39B-080819	8/8/2019	0818	SW	Water	1	x	x	
MSA-SW39C-080819	8/8/2019	0824	SW	Water	1	x	x	
MSA-SW39D-080819	8/8/2019	0831	SW	Water	1	x	x	
							6	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Hex chrome buffer

Possible Hazard Identification
☐ *Non-Hazard* ☒ *Flammable* ☐ *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. Filtered in Field**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/8/19	[signature]	ALS	8/8 1407
[signature] 8/8			ALS courier		
ALS courier			[signature]	ALS	8/8/19 2145

4°C TH318

3060390

Middletown

34 Dogwood Lane
Middletown, PA

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Vanessa Badman	Carrier: Fedex	2 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 24 HR HOLD TIME			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week Standard			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC08735	☐ 1 day			Sampler: S. Larson / W. Pryor

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium (218.6)	Sample Specific Notes:
MSA-SW40A-080819	8/8/2019	1023	SW	Water	1	x	x	
MSA-SW40B-080819	8/8/2019	1026	SW	Water	1	x	x	
MSA-SW40C-080819	8/8/2019	1031	SW	Water	1	x	x	
MSA-SW40D-080819	8/8/2019	1035	SW	Water	1	x	x	
MSA-SW41A-080819	8/8/2019	0937	SW	Water	1	x	x	
MSA-SW41B-080819	8/8/2019	0940	SW	Water	1	x	x	
MSA-SW41C-080819	8/8/2019	0946	SW	Water	1	x	x	
MSA-SW41D-080819	8/8/2019	0949	SW	Water	1	x	x	
MSA-SW42A-080819	8/8/2019	1043	SW	Water	1	x	x	
MSA-SW42B-080819	8/8/2019	1047	SW	Water	1	x	x	
MSA-SW42C-080819	8/8/2019	1052	SW	Water	1	x	x	
MSA-SW42D-080819	8/8/2019	1056	SW	Water	1	x	x	
							6	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____ Hex Chrom Buffer ____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *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. Filtered in Field**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature] 8/8	Tetra Tech	8/8/19	[signature]	ALS	8/8 1407
[signature]	Company:	Date/Time:	Received by: Courier	Company: ALS	Date/Time:
Relinquished by: Courier	Company: ALS	Date/Time:	Received by: [signature]	Company: ALS	Date/Time: 8/8/19 2145

3050570

Middletown

34 Dogwood Lane
Middletown, PA

Chain of Custody Record

ALS Environmental

Client Contact	Project Manager: Tony Apanavage	Site Contact: Tony Apanavage	Date: 8/8/2019	COC No:
Tetra Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Vanessa Badman	Carrier: Fedex	3 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W)			
(301) 528-3021 Phone	TAT if different from Below: 24 HR HOLD TIME			
(301) 528-3000 – FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week Standard			
Site: MSA Frog Mortar Creek	☐ 2 days			Sampler: S. Larson / W. Pryor
Project # 112IC08735	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium (218.6)	Sample Specific Notes:
MSA-SW43A-080819	8/8/2019	0916	SW	Water	1	x	x	
MSA-SW43B-080819	8/8/2019	0920	SW	Water	1	x	x	
MSA-SW43C-080819	8/8/2019	0923	SW	Water	1	x	x	
MSA-SW43D-080819	8/8/2019	0926	SW	Water	1	x	x	
MSA-SW44A-080819	8/8/2019	0856	SW	Water	1	x	x	
MSA-SW44B-080819	8/8/2019	0901	SW	Water	1	x	x	
MSA-SW44C-080819	8/8/2019	0905	SW	Water	1	x	x	
MSA-SW44D-080819	8/8/2019	0909	SW	Water	1	x	x	
MSA-SW45A-080819	8/8/2019	0837	SW	Water	1	x	x	
MSA-SW45B-080819	8/8/2019	0840	SW	Water	1	x	x	
MSA-SW45C-080819	8/8/2019	0847	SW	Water	1	x	x	
MSA-SW45D-080819	8/8/2019	0849	SW	Water	1	x	x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Hex Chrom buffer 6.

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *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. Filtered in Field**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/8/19	[signature]	ALS	8/8 1407
[signature] 8/8	Company:	Date/Time:	Received by: Courier	Company: ALS	Date/Time:
Relinquished by: Courier	Company: ALS	Date/Time:	Received by: [signature]	Company: ALS	Date/Time: 8/8/19 2345

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

Condition of Sample Receipt Form

Client: Tetra Tech | Work Order #: 3050570 | Initials: DN | Date: 8/9

1. Were airbills / tracking numbers present and recorded?	NONE	YES	NO
Tracking number:			
2. Are Custody Seals on shipping containers intact?	NONE	YES	NO
3. Are Custody Seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present?		YES	NO
5. Are the COC and bottle labels complete, legible and in agreement?		YES	NO
5a. Does the COC contain sample locations?		YES	NO
5b. Does the COC contain date and time of sample collection for all samples?		YES	NO
5c. Does the COC contain sample collectors name?		YES	NO
5d. Does the COC note the type(s) of preservation for all bottles?		YES	NO
5e. Does the COC note the number of bottles submitted for each sample?		YES	NO
5f. Does the COC note the type of sample, composite or grab?		YES	NO
5g. Does the COC note the matrix of the sample(s)?		YES	NO
6. Are all aqueous samples requiring preservation preserved correctly?	N/A	YES	NO
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		YES	NO
8. Are all samples within holding times for the requested analyses?		YES	NO
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		YES	NO
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	N/A	YES	NO
11. Were the samples received on ice?		YES	NO
12. Were sample temperatures measured at 0.0-6.0°C		YES	NO
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	NO
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO

Cooler #: _____

Temperature (°C): 4

Thermometer ID: 318

COMMENTS (Required for all NO responses above and any sample non-conformance):

→ No C/G

→ No Pres. Listed

Rev. 1/10/2019

Tetra Tech, Inc.
ALS-Middletown
Case Narrative
TLG-042

Sample Management

This report contains the results of the analysis of thirty-six (36) water samples collected on August 8, 2019. Analytical results and quality control information are summarized in this data package.

Sample Receipt

The samples arrived at ALS via courier on August 8, 2019. Upon receipt, the samples were inspected and compared to the Chain of Custody. Sample temperature was documented on the enclosed Chain of Custody. The samples were received intact and properly preserved, unless noted on the enclosed Certificate of Analysis and/or Chain of Custody.

Hexavalent Chromium by EPA Method 218.6

Sample handling. Thirty-six (36) water samples were analyzed for hexavalent chromium by EPA Method 218.6. The samples were pH adjusted using ammonium sulfate buffer to a range of 9.3-9.7 and analyzed within the 28-day hold time.

Calibration. A monthly calibration was properly established on instrument IC#4 on 8/9/2019. Continuing calibration verification standards were analyzed to verify the calibration. The initial calibration standard was within the QC limit of 95-105% and the continuous calibration standards were within the QC limits of 90-110%.

Blanks. Method blanks were analyzed with the samples. Hexavalent chromium was not detected above the reporting limit of 0.25 µg/L in the blanks.

Laboratory Control Samples. Laboratory control samples identified as 2993774 and 2993784 were analyzed initially and every 20 samples. Recoveries were within the QC limits of 90-110%.

Laboratory control samples identified as 2993772 and 2993782 were analyzed initially and every 20 samples. Recoveries were within the QC limits of 50-150%.

Spikes. A matrix spike and matrix spike duplicate analysis was performed on sample 3050570005 (MSA-SW38A-080819). Recoveries were within QC criteria.

A matrix spike and matrix spike duplicate analysis was performed on sample 3050570009 (MSA-SW39A-080819). Recoveries were within QC criteria.

A matrix spike and matrix spike duplicate analysis was performed on sample 3050570023 (MSA-SW42C-080819). Recoveries were within QC criteria.

A matrix spike and matrix spike duplicate analysis was performed on sample 3050570031 (MSA-SW44C-080819). Recoveries were within QC criteria.

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

SAMPLE SUMMARY

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3050570001	MSA-SW37A-080819	Water	8/8/2019 11:02	8/8/2019 21:45	Collected by Client
3050570002	MSA-SW37B-080819	Water	8/8/2019 11:06	8/8/2019 21:45	Collected by Client
3050570003	MSA-SW37C-080819	Water	8/8/2019 11:11	8/8/2019 21:45	Collected by Client
3050570004	MSA-SW37D-080819	Water	8/8/2019 11:15	8/8/2019 21:45	Collected by Client
3050570005	MSA-SW38A-080819	Water	8/8/2019 10:01	8/8/2019 21:45	Collected by Client
3050570006	MSA-SW38B-080819	Water	8/8/2019 10:05	8/8/2019 21:45	Collected by Client
3050570007	MSA-SW38C-080819	Water	8/8/2019 10:10	8/8/2019 21:45	Collected by Client
3050570008	MSA-SW38D-080819	Water	8/8/2019 10:15	8/8/2019 21:45	Collected by Client
3050570009	MSA-SW39A-080819	Water	8/8/2019 08:11	8/8/2019 21:45	Collected by Client
3050570010	MSA-SW39B-080819	Water	8/8/2019 08:18	8/8/2019 21:45	Collected by Client
3050570011	MSA-SW39C-080819	Water	8/8/2019 08:24	8/8/2019 21:45	Collected by Client
3050570012	MSA-SW39D-080819	Water	8/8/2019 08:31	8/8/2019 21:45	Collected by Client
3050570013	MSA-SW40A-080819	Water	8/8/2019 10:23	8/8/2019 21:45	Collected by Client
3050570014	MSA-SW40B-080819	Water	8/8/2019 10:26	8/8/2019 21:45	Collected by Client
3050570015	MSA-SW40C-080819	Water	8/8/2019 10:31	8/8/2019 21:45	Collected by Client
3050570016	MSA-SW40D-080819	Water	8/8/2019 10:35	8/8/2019 21:45	Collected by Client
3050570017	MSA-SW41A-080819	Water	8/8/2019 09:37	8/8/2019 21:45	Collected by Client
3050570018	MSA-SW41B-080819	Water	8/8/2019 09:40	8/8/2019 21:45	Collected by Client
3050570019	MSA-SW41C-080819	Water	8/8/2019 09:46	8/8/2019 21:45	Collected by Client
3050570020	MSA-SW41D-080819	Water	8/8/2019 09:49	8/8/2019 21:45	Collected by Client
3050570021	MSA-SW42A-080819	Water	8/8/2019 10:43	8/8/2019 21:45	Collected by Client
3050570022	MSA-SW42B-080819	Water	8/8/2019 10:47	8/8/2019 21:45	Collected by Client
3050570023	MSA-SW42C-080819	Water	8/8/2019 10:52	8/8/2019 21:45	Collected by Client
3050570024	MSA-SW42D-080819	Water	8/8/2019 10:56	8/8/2019 21:45	Collected by Client
3050570025	MSA-SW43A-080819	Water	8/8/2019 09:16	8/8/2019 21:45	Collected by Client
3050570026	MSA-SW43B-080819	Water	8/8/2019 09:20	8/8/2019 21:45	Collected by Client
3050570027	MSA-SW43C-080819	Water	8/8/2019 09:23	8/8/2019 21:45	Collected by Client
3050570028	MSA-SW43D-080819	Water	8/8/2019 09:26	8/8/2019 21:45	Collected by Client
3050570029	MSA-SW44A-080819	Water	8/8/2019 08:56	8/8/2019 21:45	Collected by Client
3050570030	MSA-SW44B-080819	Water	8/8/2019 09:01	8/8/2019 21:45	Collected by Client
3050570031	MSA-SW44C-080819	Water	8/8/2019 09:05	8/8/2019 21:45	Collected by Client
3050570032	MSA-SW44D-080819	Water	8/8/2019 09:09	8/8/2019 21:45	Collected by Client
3050570033	MSA-SW45A-080819	Water	8/8/2019 08:37	8/8/2019 21:45	Collected by Client
3050570034	MSA-SW45B-080819	Water	8/8/2019 08:40	8/8/2019 21:45	Collected by Client

ALS Environmental

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

SAMPLE SUMMARY

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3050570035	MSA-SW45C-080819	Water	8/8/2019 08:47	8/8/2019 21:45	Collected by Client
3050570036	MSA-SW45D-080819	Water	8/8/2019 08:49	8/8/2019 21:45	Collected by Client

ALS Environmental

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

SAMPLE SUMMARY

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID	Sample ID	Analysis Method	Prep Method
3050570001	MSA-SW37A-080819	EPA 218.6	
3050570002	MSA-SW37B-080819	EPA 218.6	
3050570003	MSA-SW37C-080819	EPA 218.6	
3050570004	MSA-SW37D-080819	EPA 218.6	
3050570005	MSA-SW38A-080819	EPA 218.6	
3050570006	MSA-SW38B-080819	EPA 218.6	
3050570007	MSA-SW38C-080819	EPA 218.6	
3050570008	MSA-SW38D-080819	EPA 218.6	
3050570009	MSA-SW39A-080819	EPA 218.6	
3050570010	MSA-SW39B-080819	EPA 218.6	
3050570011	MSA-SW39C-080819	EPA 218.6	
3050570012	MSA-SW39D-080819	EPA 218.6	
3050570013	MSA-SW40A-080819	EPA 218.6	
3050570014	MSA-SW40B-080819	EPA 218.6	
3050570015	MSA-SW40C-080819	EPA 218.6	
3050570016	MSA-SW40D-080819	EPA 218.6	
3050570017	MSA-SW41A-080819	EPA 218.6	
3050570018	MSA-SW41B-080819	EPA 218.6	
3050570019	MSA-SW41C-080819	EPA 218.6	
3050570020	MSA-SW41D-080819	EPA 218.6	
3050570021	MSA-SW42A-080819	EPA 218.6	
3050570022	MSA-SW42B-080819	EPA 218.6	
3050570023	MSA-SW42C-080819	EPA 218.6	
3050570024	MSA-SW42D-080819	EPA 218.6	
3050570025	MSA-SW43A-080819	EPA 218.6	
3050570026	MSA-SW43B-080819	EPA 218.6	
3050570027	MSA-SW43C-080819	EPA 218.6	
3050570028	MSA-SW43D-080819	EPA 218.6	
3050570029	MSA-SW44A-080819	EPA 218.6	
3050570030	MSA-SW44B-080819	EPA 218.6	
3050570031	MSA-SW44C-080819	EPA 218.6	
3050570032	MSA-SW44D-080819	EPA 218.6	
3050570033	MSA-SW45A-080819	EPA 218.6	
3050570034	MSA-SW45B-080819	EPA 218.6	
3050570035	MSA-SW45C-080819	EPA 218.6	
3050570036	MSA-SW45D-080819	EPA 218.6	

ALS Environmental

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

QUALITY CONTROL DATA

Workorder: 3050570 TLG042|MSA Surface Water 08/08

QC Batch: WETC/225881 **Analysis Method:** EPA 218.6

QC Batch Method: EPA 218.6

Associated Lab Samples: 3050570009, 3050570010, 3050570011, 3050570012, 3050570017, 3050570018, 3050570019, 3050570020, 3050570025, 3050570026, 3050570027, 3050570028, 3050570029, 3050570030, 3050570031, 3050570032, 3050570033, 3050570034, 3050570035, 3050570036

METHOD BLANK: 2993771

Parameter	Blank Result	Units	Reporting Limit
Hexavalent Chromium	ND	ug/L	0.25

LABORATORY CONTROL SAMPLE: 2993774

Parameter	LCS % Rec	Units	Spike Conc.	LCS Result	% Rec Limit
Hexavalent Chromium	98.6	ug/L	10	9.9	90 - 110

MATRIX SPIKE: 2993775 DUPLICATE: 2993776 ORIGINAL: 3050570009

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Parameter	Original Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Hexavalent Chromium	0	ug/L	5	4.97	5.028	99.4	101	90 - 110	1.16	20

METHOD BLANK: 2993778

Parameter	Blank Result	Units	Reporting Limit
Hexavalent Chromium	ND	ug/L	0.25

MATRIX SPIKE: 2993779 DUPLICATE: 2993780 ORIGINAL: 3050570031

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Parameter	Original Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Hexavalent Chromium	0	ug/L	5	4.933	5.059	98.7	101	90 - 110	2.52	20

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

QUALITY CONTROL DATA

Workorder: 3050570 TLG042|MSA Surface Water 08/08

QC Batch: WETC/225882 **Analysis Method:** EPA 218.6

QC Batch Method: EPA 218.6

Associated Lab Samples: 3050570001, 3050570002, 3050570003, 3050570004, 3050570005, 3050570006, 3050570007, 3050570008, 3050570013, 3050570014, 3050570015, 3050570016, 3050570021, 3050570022, 3050570023, 3050570024

METHOD BLANK: 2993781

Parameter	Blank Result	Units	Reporting Limit
Hexavalent Chromium	ND	ug/L	0.25

LABORATORY CONTROL SAMPLE: 2993784

Parameter	LCS % Rec	Units	Spike Conc.	LCS Result	% Rec Limit
Hexavalent Chromium	99.3	ug/L	10	9.9	90 - 110

MATRIX SPIKE: 2993785 DUPLICATE: 2993786 ORIGINAL: 3050570005

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Parameter	Original Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Hexavalent Chromium	0	ug/L	5	5.056	4.854	101	97.1	90 - 110	4.08	20

METHOD BLANK: 2993788

Parameter	Blank Result	Units	Reporting Limit
Hexavalent Chromium	ND	ug/L	0.25

MATRIX SPIKE: 2993789 DUPLICATE: 2993790 ORIGINAL: 3050570023

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

Parameter	Original Result	Units	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD
Hexavalent Chromium	0	ug/L	5	5.059	5.019	101	100	90 - 110	.79	20

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QUALITY CONTROL DATA

Workorder: 3050570 TLG042|MSA Surface Water 08/08

METHOD BLANK: 2993792

Parameter	Blank Result	Units	Reporting Limit
Hexavalent Chromium	ND	ug/L	0.25

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
3050570009	MSA-SW39A-080819			EPA 218.6	WETC/225881
3050570010	MSA-SW39B-080819			EPA 218.6	WETC/225881
3050570011	MSA-SW39C-080819			EPA 218.6	WETC/225881
3050570012	MSA-SW39D-080819			EPA 218.6	WETC/225881
3050570017	MSA-SW41A-080819			EPA 218.6	WETC/225881
3050570018	MSA-SW41B-080819			EPA 218.6	WETC/225881
3050570019	MSA-SW41C-080819			EPA 218.6	WETC/225881
3050570020	MSA-SW41D-080819			EPA 218.6	WETC/225881
3050570025	MSA-SW43A-080819			EPA 218.6	WETC/225881
3050570026	MSA-SW43B-080819			EPA 218.6	WETC/225881
3050570027	MSA-SW43C-080819			EPA 218.6	WETC/225881
3050570028	MSA-SW43D-080819			EPA 218.6	WETC/225881
3050570029	MSA-SW44A-080819			EPA 218.6	WETC/225881
3050570030	MSA-SW44B-080819			EPA 218.6	WETC/225881
3050570031	MSA-SW44C-080819			EPA 218.6	WETC/225881
3050570032	MSA-SW44D-080819			EPA 218.6	WETC/225881
3050570033	MSA-SW45A-080819			EPA 218.6	WETC/225881
3050570034	MSA-SW45B-080819			EPA 218.6	WETC/225881
3050570035	MSA-SW45C-080819			EPA 218.6	WETC/225881
3050570036	MSA-SW45D-080819			EPA 218.6	WETC/225881
3050570001	MSA-SW37A-080819			EPA 218.6	WETC/225882
3050570002	MSA-SW37B-080819			EPA 218.6	WETC/225882
3050570003	MSA-SW37C-080819			EPA 218.6	WETC/225882
3050570004	MSA-SW37D-080819			EPA 218.6	WETC/225882
3050570005	MSA-SW38A-080819			EPA 218.6	WETC/225882
3050570006	MSA-SW38B-080819			EPA 218.6	WETC/225882
3050570007	MSA-SW38C-080819			EPA 218.6	WETC/225882
3050570008	MSA-SW38D-080819			EPA 218.6	WETC/225882
3050570013	MSA-SW40A-080819			EPA 218.6	WETC/225882
3050570014	MSA-SW40B-080819			EPA 218.6	WETC/225882
3050570015	MSA-SW40C-080819			EPA 218.6	WETC/225882
3050570016	MSA-SW40D-080819			EPA 218.6	WETC/225882

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 3050570 TLG042|MSA Surface Water 08/08

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
3050570021	MSA-SW42A-080819			EPA 218.6	WETC/225882
3050570022	MSA-SW42B-080819			EPA 218.6	WETC/225882
3050570023	MSA-SW42C-080819			EPA 218.6	WETC/225882
3050570024	MSA-SW42D-080819			EPA 218.6	WETC/225882

Pos	Name	lutionFac	*SampleType	Comment	*Instrument	*Batch	*Sequence1	*InitialCal	Status
1	Cal Std 1	1	CAL		IC-4		080919	080919	finished
2	Cal Std 2	1	CAL		IC-4		080919	080919	finished
3	Cal Std 3	1	CAL		IC-4		080919	080919	finished
4	Cal Std 4	1	CAL		IC-4		080919	080919	finished
5	Cal Std 5	1	CAL		IC-4		080919	080919	finished
6	Cal Std 6	1	CAL		IC-4		080919	080919	finished
7	2993771	1	MB	LRB	IC-4	225881	080919	080919	finished
8	2993772	1	MRL	MRL	IC-4	225881	080919	080919	finished
9	2993773	1	CCVL	LFB	IC-4	225881	080919	080919	finished
10	2993774	1	LCS	QCS	IC-4	225881	080919	080919	finished
11	3050570009	1	SAMPLE		IC-4	225881	080919	080919	finished
12	2993775	1	MS		IC-4	225881	080919	080919	finished
13	2993776	1	MSD		IC-4	225881	080919	080919	finished
14	3050570010	1	SAMPLE		IC-4	225881	080919	080919	finished
15	3050570011	1	SAMPLE		IC-4	225881	080919	080919	finished
16	3050570012	1	SAMPLE		IC-4	225881	080919	080919	finished
17	3050570033	1	SAMPLE		IC-4	225881	080919	080919	finished
18	3050570034	1	SAMPLE		IC-4	225881	080919	080919	finished
19	3050570035	1	SAMPLE		IC-4	225881	080919	080919	finished
20	3050570036	1	SAMPLE		IC-4	225881	080919	080919	finished
21	3050570029	1	SAMPLE		IC-4	225881	080919	080919	finished
22	2993777	1	CCVH		IC-4	225881	080919	080919	finished
23	2993778	1	MB		IC-4	225881	080919	080919	finished
24	3050570030	1	SAMPLE		IC-4	225881	080919	080919	finished
25	3050570031	1	SAMPLE		IC-4	225881	080919	080919	finished
26	2993779	1	MS		IC-4	225881	080919	080919	finished
27	2993780	1	MSD		IC-4	225881	080919	080919	finished
28	3050570032	1	SAMPLE		IC-4	225881	080919	080919	finished
29	3050570025	1	SAMPLE		IC-4	225881	080919	080919	finished
30	3050570026	1	SAMPLE		IC-4	225881	080919	080919	finished
31	3050570027	1	SAMPLE		IC-4	225881	080919	080919	finished
32	3050570028	1	SAMPLE		IC-4	225881	080919	080919	finished
33	3050570017	1	SAMPLE		IC-4	225881	080919	080919	finished
34	3050570018	1	SAMPLE		IC-4	225881	080919	080919	finished
35	3050570019	1	SAMPLE		IC-4	225881	080919	080919	finished
36	3050570020	1	SAMPLE		IC-4	225881	080919	080919	finished
37	2993781	1	MB	LRB	IC-4	225882	080919	080919	finished
38	2993782	1	MRL	MRL	IC-4	225882	080919	080919	finished
39	2993783	1	CCVL	LFB	IC-4	225882	080919	080919	finished
40	2993784	1	LCS	QCS	IC-4	225882	080919	080919	finished
41	3050570005	1	SAMPLE		IC-4	225882	080919	080919	finished
42	2993785	1	MS		IC-4	225882	080919	080919	finished

43	2993786	1	MSD		IC-4	225882	080919	080919	finished
44	3050570006	1	SAMPLE		IC-4	225882	080919	080919	finished
45	3050570007	1	SAMPLE		IC-4	225882	080919	080919	finished
46	3050570008	1	SAMPLE		IC-4	225882	080919	080919	finished
47	3050570013	1	SAMPLE		IC-4	225882	080919	080919	finished
48	3050570014	1	SAMPLE		IC-4	225882	080919	080919	finished
49	3050570015	1	SAMPLE		IC-4	225882	080919	080919	finished
50	3050570016	1	SAMPLE		IC-4	225882	080919	080919	finished
1	3050570021	1	SAMPLE		IC-4	225882	080919	080919	finished
2	3050570022	1	SAMPLE		IC-4	225882	080919	080919	finished
3	2993787	1	CCVH		IC-4	225882	080919	080919	finished
4	2993788	1	MB		IC-4	225882	080919	080919	finished
5	3050570023	1	SAMPLE		IC-4	225882	080919	080919	finished
6	2993789	1	MS		IC-4	225882	080919	080919	finished
7	2993790	1	MSD		IC-4	225882	080919	080919	finished
8	3050570024	1	SAMPLE		IC-4	225882	080919	080919	finished
9	3050570001	1	SAMPLE		IC-4	225882	080919	080919	finished
10	3050570002	1	SAMPLE		IC-4	225882	080919	080919	finished
11	3050570003	1	SAMPLE		IC-4	225882	080919	080919	finished
12	3050570004	1	SAMPLE		IC-4	225882	080919	080919	finished
13	2993791	1	CCVL		IC-4	225882	080919	080919	finished
14	2993792	1	MB		IC-4	225882	080919	080919	finished
15	SHUTDOWN		MISC		IC-4	225882	080919	080919	finished

Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Amount of Buffer Added (mL)	Final pH 9-9.5, SI units	0.4 µm Filtered
3050570001	Cr+6 Buffer	0.2	X	lab
3050570002	Cr+6 Buffer	0.2	X	lab
3050570003	Cr+6 Buffer	0.2	X	lab
3050570004	Cr+6 Buffer	0.2	X	lab
3050570005	Cr+6 Buffer	0.2	X	lab
3050570006	Cr+6 Buffer	0.2	X	lab
3050570007	Cr+6 Buffer	0.2	X	lab
3050570008	Cr+6 Buffer	0.2	X	lab
3050570009	Cr+6 Buffer	0.2	X	lab
3050570010	Cr+6 Buffer	0.2	X	lab
3050570011	Cr+6 Buffer	0.2	X	lab
3050570012	Cr+6 Buffer	0.2	X	lab
3050570013	Cr+6 Buffer	0.2	X	lab
3050570014	Cr+6 Buffer	0.2	X	lab
3050570015	Cr+6 Buffer	0.2	X	lab
3050570016	Cr+6 Buffer	0.2	X	lab
3050570017	Cr+6 Buffer	0.2	X	lab
3050570018	Cr+6 Buffer	0.2	X	lab
3050570019	Cr+6 Buffer	0.2	X	lab
3050570020	Cr+6 Buffer	0.2	X	lab
3050570021	Cr+6 Buffer	0.2	X	lab
3050570022	Cr+6 Buffer	0.2	X	lab
3050570023	Cr+6 Buffer	0.2	X	lab
3050570024	Cr+6 Buffer	0.2	X	lab
3050570025	Cr+6 Buffer	0.2	X	lab
3050570026	Cr+6 Buffer	0.2	X	lab
3050570027	Cr+6 Buffer	0.2	X	lab
3050570028	Cr+6 Buffer	0.2	X	lab
3050570029	Cr+6 Buffer	0.2	X	lab
3050570030	Cr+6 Buffer	0.2	X	lab
3050570031	Cr+6 Buffer	0.2	X	lab
3050570032	Cr+6 Buffer	0.2	X	lab

Date:	08/09/19
Time:	2:25
Tech:	MBW
Queue:	WETC
Batch:	225881/2
SOP ID:	04-218.6

Reagent:	
Cr+6 Buffer:	WR190809005
Litmus Paper:	222316A

Reviewed by:	CHW
Reviewed date:	8/10/19

_Q:WETC|_B:225881/2|_D:08/09/19

Comments:

An "X" in the Final pH column indicates that the sample pH is within this range.

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Revision 12/20/17

Cr+6 218.6 pH Filtration Prep

Sample	Adjusted With	Amount of Buffer Added (mL)	Final pH 9-9.5, SI units	0.4 µm Filtered
3050570033	Cr+6 Buffer	0.2	X	lab
3050570034	Cr+6 Buffer	0.2	X	lab
3050570035	Cr+6 Buffer	0.2	X	lab
3050570036	Cr+6 Buffer	0.2	X	lab

MBr 8/9/19

Date:	08/09/19
Time:	2:25
Tech:	MBW
Queue:	WETC
Batch:	225881/2
SOP ID:	04-218.6

Reagent:	
Cr+6 Buffer:	WR190809005
Litmus Paper:	222316A

Reviewed by:	CHW
Reviewed date:	8/10/19

_Q:WETC|_B:225881/2|_D:08/09/19

Comments:

An "X" in the Final pH column indicates that the sample pH is within this range.

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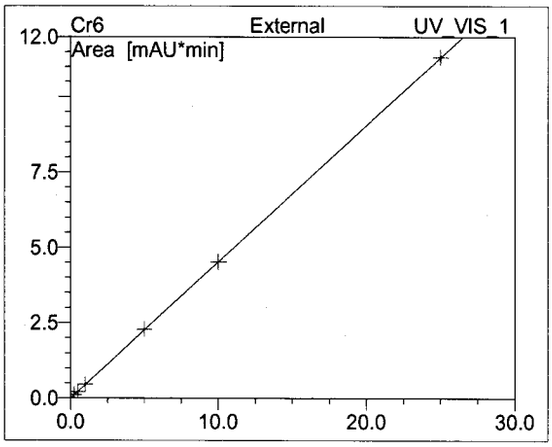
Revision 12/20/17

Calibration Batch Report

Sequence:	4-080919	Instrument:	IC-4
Instrument Method:	cr+6 AS40	InitialCal:	080919
Ini. Date/Time:	08/09/19 04:33	Method:	218_6_080919



No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
1	3.74	Cr6	0QOff	6	-0.004	0.454	0.000	99.9994
AVERAGE:					-0.0041	0.4544	-0.0001	99.9994

Form 6B
Inorganic Initial and Continuing Calibration Verification Summary

Analysis Method: EPA 218.6 SDG No. TLG042

Instrument ID: IC-4 Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2993773	Hexavalent Chromium	CCVL	08/09/2019 04:41	5	5.0	101		90 - 110
2993777	Hexavalent Chromium	CCVH	08/09/2019 06:20	20	20.2	101		90 - 110
2993783	Hexavalent Chromium	CCVL	08/09/2019 08:29	5	5.0	101		90 - 110
2993787	Hexavalent Chromium	CCVH	08/09/2019 10:16	20	20.1	100		90 - 110
2993791	Hexavalent Chromium	CCVL	08/09/2019 11:32	5	5.0	99.3		90 - 110

(1) The following qualifiers are used:
* : Values outside of acceptable limits

Comments:

Form 4B
Inorganic Blank Summary

Analysis Method: EPA 218.6
Instrument: IC-4

SDG No.: TLG042

Sample ID	Analyte	Type	Matrix	Analyzed	Result	Q (1)	Units
2993771	Hexavalent Chromium	MB	QC-Water	08/09/2019 04:26	0.25	U	ug/L
2993778	Hexavalent Chromium	MB	QC-Water	08/09/2019 06:27	0.25	U	ug/L
2993781	Hexavalent Chromium	MB	QC-Water	08/09/2019 08:14	0.25	U	ug/L
2993788	Hexavalent Chromium	MB	QC-Water	08/09/2019 10:23	0.25	U	ug/L
2993792	Hexavalent Chromium	MB	QC-Water	08/09/2019 11:39	0.25	U	ug/L

(1) The following qualifiers are used:

U: The analyte concentration is less than the reporting limit listed
J: The analyte concentration is less than the reporting limit but greater than the method detection limit

Comments:

Form 8B
Laboratory Control Sample (LCS) Recovery Summary

Analysis Method: EPA 218.6 SDG No.: TLG042

Matrix (soil/water): QC-Water Instrument ID: IC-4
Units: ug/L

Sample ID	Analyte	Type	Analyzed	True Conc.	Conc. Recovered	Recovery (%)	(1)	Acc. Limit (%)
2993772	Hexavalent Chromium	MRL	08/09/2019 04:33	0.25	0.24	96		50 - 150
2993774	Hexavalent Chromium	LCS	08/09/2019 04:49	10	9.9	98.6		90 - 110
2993782	Hexavalent Chromium	MRL	08/09/2019 08:22	0.25	0.27	106		50 - 150
2993784	Hexavalent Chromium	LCS	08/09/2019 08:37	10	9.9	99.3		90 - 110

(1) The following qualifiers are used:
* : Values outside of acceptable limits

Comments:

Sample Description

MSA-SW38A-080819

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TLG042
Units: ug/L
Lab Sample ID: 3050570005
Lab MS Sample ID: 2993785
Lab MSD Sample ID: 2993786

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	5.1	101		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	4.9	97.1		90 - 110	4.08		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW39A-080819

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TLG042
Units: ug/L
Lab Sample ID: 3050570009
Lab MS Sample ID: 2993775
Lab MSD Sample ID: 2993776

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	5.0	99.4		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	5.0	101		90 - 110	1.16		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW42C-080819

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TLG042
Units: ug/L
Lab Sample ID: 3050570023
Lab MS Sample ID: 2993789
Lab MSD Sample ID: 2993790

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	5.1	101		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	5.0	100		90 - 110	0.79		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

Sample Description

MSA-SW44C-080819

Form 3A
Matrix Spike and Matrix Spike Duplicate Recovery Summary

Analysis Method: EPA 218.6
Matrix (soil/water): Water

SDG No.: TLG042
Units: ug/L
Lab Sample ID: 3050570031
Lab MS Sample ID: 2993779
Lab MSD Sample ID: 2993780

Analyte	Spike Added	Sample Concentration	MS Concentration	MS Recovery (%)	(1)	Acceptable Limits (%)
Hexavalent Chromium	5	0.0	4.9	98.7		90 - 110

Analyte	Spike Added	MSD Concentration	MSD Recovery (%)	(1)	Acceptable Limits (%)	RPD (%)	(1)	Acc. Lim. (%)
Hexavalent Chromium	5	5.1	101		90 - 110	2.52		20

(1) The following qualifiers are used:

* : Values outside of acceptable limits
D : Spikes diluted out

Comments:

APPENDIX C—CHEMICAL-RESULTS DATA TABLE

LOCATION	EL-SW01A	EL-SW01B	EL-SW01C	EL-SW01D	MSA-SW37A	MSA-SW37B	MSA-SW37C	MSA-SW37D	MSA-SW38A	MSA-SW38B
SAMPLE ID	EL-SW01A-080819	EL-SW01B-080819	EL-SW01C-080819	EL-SW01D-080819	MSA-SW37A-080819	MSA-SW37B-080819	MSA-SW37C-080819	MSA-SW37D-080819	MSA-SW38A-080819	MSA-SW38B-080819
SAMPLE DATE	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808
VOLATILES (UG/L)										
1,1,1,2-TETRACHLOROETHANE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1,1-TRICHLOROETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-TETRACHLOROETHANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
1,1,2-TRICHLOROTRIFLUOROETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,1-DICHLOROETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1-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	0.19 U	0.19 U
1,1-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	0.14 U	0.14 U
1,2,3-TRICHLOROBENZENE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,2,3-TRICHLOROPROPANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-TRIMETHYLBENZENE	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,4-TRICHLOROBENZENE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
1,2,4-TRIMETHYLBENZENE	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
1,2-DIBROMO-3-CHLOROPROPANE	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
1,2-DIBROMOETHANE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DICHLOROBENZENE	0.15 U	0.15 U	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-DICHLOROETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-DICHLOROPROPANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-DICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-DICHLOROPROPANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-DICHLOROBENZENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
2,2-DICHLOROPROPANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
2-BUTANONE	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-CHLOROETHYL VINYL ETHER	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR
2-CHLOROTOLUENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
2-HEXANONE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-CHLOROTOLUENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
4-ISOPROPYLTOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
4-METHYL-2-PENTANONE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
ACETONE	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
BROMOCHLOROMETHANE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
BROMODICHLOROMETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
BROMOFORM	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
BROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
CARBON DISULFIDE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
CARBON TETRACHLORIDE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
CHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
CHLORODIBROMOMETHANE	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROETHANE	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
CHLOROFORM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROMETHANE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CIS-1,2-DICHLOROETHENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CIS-1,3-DICHLOROPROPENE	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
DIBROMOMETHANE	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
DICHLORODIFLUOROMETHANE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
DIISOPROPYL 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	0.17 U	0.17 U
ETHYL TERT-BUTYL ETHER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
ETHYLBENZENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
HEXACHLOROBUTADIENE	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ
ISOPROPYLBENZENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
M+P-XYLENES	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
METHYL TERT-BUTYL ETHER	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
METHYLENE CHLORIDE	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
NAPHTHALENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
N-BUTYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
N-PROPYLBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
O-XYLENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 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	0.13 U	0.13 U
STYRENE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TERT-AMYL METHYL 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	0.11 U	0.11 U
TERT-BUTYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TERTIARY-BUTYL ALCOHOL	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
TETRACHLOROETHENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
TOLUENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TOTAL XYLENES	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 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	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
TRICHLOROETHENE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRICHLOROFLUOROMETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METALS (UG/L)										
ANTIMONY	--	--	--	--	0.57 U	0.63 J	0.57 U	0.57 U	0.57 U	0.57 U
ARSENIC	--	--	--	--	2.2 J	2.1 J	2.2 J	1.9 J	2.4 J	2.2 J
BARIUM	--	--	--	--	11	10	11	11	12	11
BERYLLIUM	--	--	--	--	0.32 J	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
CADMIUM	--	--	--	--	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
CHROMIUM	--	--	--	--	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
COBALT	--	--	--	--	0.22 J	0.21 J	0.19 U	0.19 U	0.21 J	0.19 U
COPPER	--	--	--	--	4.9	4.8	5.4	5.4	5.8	5.3
LEAD	--	--	--	--	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
MERCURY	--	--	--	--	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
MOLYBDENUM	--	--	--	--	1.4 J	1.4 J	1.1 U	1.1 U	1.1 U	1.1 U
NICKEL	--	--	--	--	1.9 J	1.5 J	1.6 J	1.9 J	1.7 J	1.6 J
SELENIUM	--	--	--	--	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
SILVER	--	--	--	--	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U
THALLIUM	--	--	--	--	0.38 J	0.41 J	0.2 U	0.2 U	0.2 U	0.2 U
TUNGSTEN	--	--	--	--	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
VANADIUM	--	--	--	--	1.1 J	1.1 J	1.2 J	1 J	1.2 J	1 J
ZINC	--	--	--	--	15 U	15 U	15 U	15 U	15 U	15 U
MISCELLANEOUS PARAMETERS (MG/L)										
CALCIUM HARDNESS AS CACO3	--	--	--	--	18	16	18	18	18	17
DISSOLVED ORGANIC CARBON	--	--	--	--	--	3.7	--	--	--	3.6
HARDNESS AS CACO3	--	--	--	--	110	100	110	110	120	120
MAGNESIUM HARDNESS AS CACO3	--	--	--	--	93	85	94	95	100	100
MISCELLANEOUS PARAMETERS (UG/L)										
HEXAVALENT CHROMIUM	--	--	--	--	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U

LOCATION	MSA-SW38C	MSA-SW38D	MSA-SW39A	MSA-SW39B	MSA-SW39C	MSA-SW39D	MSA-SW40A	MSA-SW40B	MSA-SW40C
SAMPLE ID	MSA-SW38C-080819	MSA-SW38D-080819	MSA-SW39A-080819	MSA-SW39B-080819	MSA-SW39C-080819	MSA-SW39D-080819	MSA-SW40A-080819	MSA-SW40B-080819	MSA-SW40C-080819
SAMPLE DATE	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808
VOLATILES (UG/L)									
1,1,1,2-TETRACHLOROETHANE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1,1-TRICHLOROETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-TETRACHLOROETHANE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ
1,1,2-TRICHLOROTRIFLUOROETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,1-DICHLOROETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1-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	0.19 U
1,1-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	0.14 U
1,2,3-TRICHLOROBENZENE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1,2,3-TRICHLOROPROPANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-TRIMETHYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,4-TRICHLOROBENZENE	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
1,2,4-TRIMETHYLBENZENE	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
1,2-DIBROMO-3-CHLOROPROPANE	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
1,2-DIBROMOETHANE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DICHLOROBENZENE	0.15 U	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-DICHLOROETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-DICHLOROPROPANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-DICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-DICHLOROPROPANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-DICHLOROBENZENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
2,2-DICHLOROPROPANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
2-BUTANONE	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-CHLOROETHYL VINYL ETHER	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR
2-CHLOROTOLUENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
2-HEXANONE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-CHLOROTOLUENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
4-ISOPROPYLTOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
4-METHYL-2-PENTANONE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
ACETONE	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
BROMOCHLOROMETHANE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
BROMODICHLOROMETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
BROMOFORM	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
BROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
CARBON DISULFIDE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
CARBON TETRACHLORIDE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
CHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
CHLORODIBROMOMETHANE	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROETHANE	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
CHLOROFORM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROMETHANE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CIS-1,2-DICHLOROETHENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CIS-1,3-DICHLOROPROPENE	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
DIBROMOMETHANE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
DICHLORODIFLUOROMETHANE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
DIISOPROPYL 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	0.17 U
ETHYL TERT-BUTYL ETHER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
ETHYLBENZENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
HEXACHLOROBUTADIENE	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ
ISOPROPYLBENZENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
M+P-XYLENES	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U
METHYL TERT-BUTYL ETHER	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
METHYLENE CHLORIDE	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
NAPHTHALENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
N-BUTYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
N-PROPYLBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
O-XYLENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 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	0.13 U
STYRENE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TERT-AMYL METHYL 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	0.11 U
TERT-BUTYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TERTIARY-BUTYL ALCOHOL	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
TETRACHLOROETHENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
TOLUENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TOTAL XYLENES	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 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	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
TRICHLOROETHENE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRICHLOROFLUOROMETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METALS (UG/L)									
ANTIMONY	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
ARSENIC	2.2 J	2.1 J	1.9 J	1.9 J	2 J	2.3 J	2.3 J	2.1 J	2.1 J
BARIUM	11	11	12	12	12	13	11	11	11
BERYLLIUM	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
CADMIUM	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
CHROMIUM	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U
COBALT	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.26 J	0.19 U	0.19 U	0.19 U
COPPER	5.4	5.1	5.2	5.2	5.4	6.1	6	5.5	5.5
LEAD	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
MERCURY	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
MOLYBDENUM	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
NICKEL	1.5 J	1.5 J	1.8 J	2	2.4	2.2	2.1	2.1	1.6 J
SELENIUM	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U
SILVER	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U
THALLIUM	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
TUNGSTEN	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
VANADIUM	0.99 J	0.82 J	0.95 J	0.98 J	0.92 J	1.2 J	1.1 J	0.96 J	0.92 J
ZINC	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
MISCELLANEOUS PARAMETERS (MG/L)									
CALCIUM HARDNESS AS CACO3	17	17	18	18	19	19	18	18	18
DISSOLVED ORGANIC CARBON	--	--	--	3.3	--	--	--	3.6	--
HARDNESS AS CACO3	120	120	130	130	130	130	120	120	120
MAGNESIUM HARDNESS AS CACO3	100	100	110	110	110	110	100	110	100
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U

LOCATION	MSA-SW40D	MSA-SW41A	MSA-SW41B	MSA-SW41C	MSA-SW41D	MSA-SW42A	MSA-SW42B	MSA-SW42C	MSA-SW42D	MSA-SW43A	MSA-SW43B	MSA-SW43C	MSA-SW43D	MSA-SW44A	MSA-SW44B	MSA-S
SAMPLE ID	MSA-SW40D-080819	MSA-SW41A-080819	MSA-SW41B-080819	MSA-SW41C-080819	MSA-SW41D-080819	MSA-SW42A-080819	MSA-SW42B-080819	MSA-SW42C-080819	MSA-SW42D-080819	MSA-SW43A-080819	MSA-SW43B-080819	MSA-SW43C-080819	MSA-SW43D-080819	MSA-SW44a-080819	MSA-SW44B-080819	MSA-SW4
SAMPLE DATE	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	2019
VOLATILES (UG/L)																
1,1,1,2-TETRACHLOROETHANE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
1,1,1-TRICHLOROETHANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24
1,1,2,2-TETRACHLOROETHANE	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 UJ	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13
1,1,2-TRICHLOROTRIFLUOROETHANE	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41
1,1-DICHLOROETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17
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	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19
1,1-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	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
1,2,3-TRICHLOROBENZENE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54
1,2,3-TRICHLOROPROPANE	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24
1,2,3-TRIMETHYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14
1,2,4-TRICHLOROBENZENE	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26
1,2,4-TRIMETHYLBENZENE	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07
1,2-DIBROMO-3-CHLOROPROPANE	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91
1,2-DIBROMOETHANE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12
1,2-DICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
1,2-DICHLOROETHANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21
1,2-DICHLOROPROPANE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
1,3-DICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
1,3-DICHLOROPROPANE	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21
1,4-DICHLOROBENZENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16
2,2-DICHLOROPROPANE	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31
2-BUTANONE	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2
2-CHLOROETHYL VINYL ETHER	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26
2-CHLOROTOLUENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
2-HEXANONE	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54
4-CHLOROTOLUENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09
4-ISOPROPYLTOLUENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13
4-METHYL-2-PENTANONE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42
ACETONE	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13
BROMOBENZENE	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12
BROMOCHLOROMETHANE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
BROMODICHLOROMETHANE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17
BROMOFORM	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76
BROMOMETHANE	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42
CARBON DISULFIDE	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28
CARBON TETRACHLORIDE	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26
CHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
CHLORODIBROMOMETHANE	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39
CHLORODIFLUOROMETHANE	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1
CHLOROETHANE	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83
CHLOROFORM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13
CHLOROMETHANE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
CIS-1,2-DICHLOROETHENE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16
CIS-1,3-DICHLOROPROPENE	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61
DIBROMOMETHANE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09
DICHLORODIFLUOROMETHANE	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35
DIISOPROPYL 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	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17
ETHYL TERT-BUTYL ETHER	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
ETHYLBENZENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11
HEXACHLOROBUTADIENE	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83
ISOPROPYLBENZENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09
M+P-XYLENES	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08
METHYL TERT-BUTYL ETHER	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07
METHYLENE CHLORIDE	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6
NAPHTHALENE	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32
N-BUTYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
N-PROPYLBENZENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
O-XYLENE	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09
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	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13
STYRENE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1
TERT-AMYL METHYL 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	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11
TERT-BUTYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
TERTIARY-BUTYL ALCOHOL	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7
TETRACHLOROETHENE	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
TOLUENE	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14
TOTAL XYLENES	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15
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	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19
TRANS-1,3-DICHLOROPROPENE	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67
TRICHLOROETHENE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1
TRICHLOROFLUOROMETHANE	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45
VINYL ACETATE	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19
VINYL CHLORIDE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
METALS (UG/L)																
ANTIMONY	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.65 J	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57
ARSENIC	2.2 J	2.1 J	2.2 J	2 J	2.2 J	2.3 J	2.2 J	2.4 J	2.4 J	2.2 J	2.2 J	2.2 J	2.2 J	1.9 J	2.2 J	2.2
BARIUM	12	11	11	11	11	12	12	11	12	12	11	12	12	12	12	12
BERYLLIUM	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.37 J	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31
CADMIUM	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21
CHROMIUM	0.98 U	0.98 U	0.98 U	0.98 U	4.4	1.2 J	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98 U	0.98
COBALT	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.25 J	0.21 J	0.19 U	0.22 J	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19
COPPER	6.1	5	6	5.2	6	5.4	5.7	5.7	6.3	5.4	5.1	5.4	5.6	5	5.9	6.1
LEAD	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45
MERCURY	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13
MOLYBDENUM	1.4 J	1.1 U	1.1 U	1.1 U	1.1 U	1.5 J	1.6 J	1.1 J	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1
NICKEL	1.7 J	1.9 J	1.7 J	1.6 J	1.7 J	2	1.8 J	1.6 J	1.8 J	1.7 J	1.6 J	1.6 J	1.7 J	1.6 J	1.8 J	1.7
SELENIUM	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	0.89
SILVER	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053
THALLIUM	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 J	0.46 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
TUNGSTEN	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.1 J	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8
VANADIUM	1 J	0.92 J	0.98 J	0.85 J	1.1 J	1.2 J	1.1 J	0.98 J	1.3 J	1.1 J	0.89 J	0.99 J	0.97 J	0.89 J	0.9 J	0.97
ZINC	15 U	15 U	15 U	15 U	15 U	15 U	15 U	20	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15
MISCELLANEOUS PARAMETERS (MG/L)																
CALCIUM HARDNESS AS CACO3	18	18	18	17	17	18	18	18	18	18	17	18	18	18	18	18
DISSOLVED ORGANIC CARBON	--	--	3.4	--	--	--	3.5	--	--	--	3.5	--	--	--	3.5	--
HARDNESS AS CACO3	120	120	120	120	120	120	120	120	120	120	120	120	120	120	130	130
MAGNESIUM HARDNESS AS CACO3	110	100	100	100	100	99	100	100	100	110	100	110	110	110	110	110
MISCELLANEOUS PARAMETERS (UG/L)																
HEXAVALENT CHROMIUM	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	0.047

LOCATION	W44C	MSA-SW44D	MSA-SW45A	MSA-SW45B	MSA-SW45C	MSA-SW45D	MSA-SW46A	MSA-SW47A	MSA-SW48A	MSA-SW49A	QC
SAMPLE ID	C-080819	MSA-SW44D-080819	MSA-SW45A-080819	MSA-SW45B-080819	MSA-SW45C-080819	MSA-SW45D-080819	MSA-SW46A-080819	MSA-SW47A-080819	MSA-SW48A-080819	MSA-SW49A-080819	TB-080819
SAMPLE DATE	0808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808	20190808
VOLATILES (UG/L)											
1,1,1,2-TETRACHLOROETHANE	U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1,1-TRICHLOROETHANE	U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2,2-TETRACHLOROETHANE	U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
1,1,2-TRICHLOROTRIFLUOROETHANE	U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
1,1-DICHLOROETHANE	U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1-DICHLOROETHENE	U	0.19 U	0.19 U	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	U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,3-TRICHLOROBENZENE	U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ	0.54 UJ
1,2,3-TRICHLOROPROPANE	U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2,3-TRIMETHYLBENZENE	UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,4-TRICHLOROBENZENE	U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ	0.26 UJ
1,2,4-TRIMETHYLBENZENE	U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
1,2-DIBROMO-3-CHLOROPROPANE	U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
1,2-DIBROMOETHANE	U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DICHLOROBENZENE	U	0.15 U	0.15 U	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-DICHLOROETHANE	U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-DICHLOROPROPANE	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-DICHLOROBENZENE	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,3-DICHLOROPROPANE	U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-DICHLOROBENZENE	U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
2,2-DICHLOROPROPANE	U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
2-BUTANONE	U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-CHLOROETHYL VINYL ETHER	UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR	0.26 UR
2-CHLOROTOLUENE	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
2-HEXANONE	U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
4-CHLOROTOLUENE	U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
4-ISOPROPYLTOLUENE	U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
4-METHYL-2-PENTANONE	U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
ACETONE	U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U	5.4 U
BENZENE	U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
BROMOCHLOROMETHANE	U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
BROMODICHLOROMETHANE	U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
BROMOFORM	U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
BROMOMETHANE	U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
CARBON DISULFIDE	U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
CARBON TETRACHLORIDE	U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
CHLOROBENZENE	U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
CHLORODIBROMOMETHANE	U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
CHLORODIFLUOROMETHANE	UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
CHLOROETHANE	U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
CHLOROFORM	U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROMETHANE	U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
CIS-1,2-DICHLOROETHENE	U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CIS-1,3-DICHLOROPROPENE	U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
DIBROMOMETHANE	UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
DICHLORODIFLUOROMETHANE	U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
DIISOPROPYL ETHER	U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
ETHYL TERT-BUTYL ETHER	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
ETHYLBENZENE	U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
HEXACHLOROBUTADIENE	UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ
ISOPROPYLBENZENE	U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
M+P-XYLENES	U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	0.1 J	0.08 U
METHYL TERT-BUTYL ETHER	U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U
METHYLENE CHLORIDE	U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
NAPHTHALENE	U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ	0.32 UJ
N-BUTYLBENZENE	U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
N-PROPYLBENZENE	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
O-XYLENE	U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U
SEC-BUTYLBENZENE	U	0.13 U	0.13 U	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	U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TERT-AMYL METHYL ETHER	U	0.11 U	0.11 U	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-BUTYLBENZENE	U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TERTIARY-BUTYL ALCOHOL	U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ
TETRACHLOROETHENE	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
TOLUENE	U	0.14 U	0.14 J	0.14 U	0.14 U	0.14 U	0.15 J	0.14 U	0.14 U	0.21 J	0.14 U
TOTAL XYLENES	U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
TRANS-1,2-DICHLOROETHENE	U	0.19 U	0.19 U	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	U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
TRICHLOROETHENE	U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
TRICHLOROFLUOROMETHANE	U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
VINYL ACETATE	U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
VINYL CHLORIDE	U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
METALS (UG/L)											
ANTIMONY	U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	--	--	--	--	--
ARSENIC	J	2.1 J	2.1 J	2 J	2.1 J	2.1 J	--	--	--	--	--
BARIUM		11	12	12	13	13	--	--	--	--	--
BERYLLIUM	U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	--	--	--	--	--
CADMIUM	U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	--	--	--	--	--
CHROMIUM	U	0.98 U	0.98 U	0.98 U	1.1 J	0.98 U	--	--	--	--	--
COBALT	U	0.19 U	0.2 J	0.19 U	0.2 J	0.22 J	--	--	--	--	--
COPPER		5.3	5.5	4.8	5.6	5.9	--	--	--	--	--
LEAD	U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 J	--	--	--	--	--
MERCURY	U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	--	--	--	--	--
MOLYBDENUM	U	1.1 U	1.1 U	1.1 U	1.1 U	1.4 J	--	--	--	--	--
NICKEL	J	1.5 J	1.8 J	1.7 J	2.1	2.6	--	--	--	--	--
SELENIUM	U	0.89 U	0.89 U	0.89 U	0.89 U	0.89 U	--	--	--	--	--
SILVER	U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	--	--	--	--	--
THALLIUM	U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	--	--	--	--	--
TUNGSTEN	U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	--	--	--	--	--
VANADIUM	J	0.89 J	1.1 J	0.96 J	1.1 J	1 J	--	--	--	--	--
ZINC	U	15 U	15 U	15 U	15 U	15 U	--	--	--	--	--
MISCELLANEOUS PARAMETERS (MG/L)											
CALCIUM HARDNESS AS CACO3		18	18	18	19	19	--	--	--	--	--
DISSOLVED ORGANIC CARBON		--	--	3.4	--	--	--	--	--	--	--
HARDNESS AS CACO3		120	120	130	130	130	--	--	--	--	--
MAGNESIUM HARDNESS AS CACO3		110	110	110	120	110	--	--	--	--	--
MISCELLANEOUS PARAMETERS (UG/L)											
HEXAVALENT CHROMIUM	U	0.047 U	0.047 U	0.047 U	0.047 U	0.047 U	--	--	--	--	--

APPENDIX D—BIOTIC LIGAND MODEL CALCULATIONS AND EPA 2007 BLM FACT SHEET

Appendix D
2007 Freshwater Biotic Ligand Model v. 3.41.2.45 Calculations in Surface Water Samples—August 2019
Frog Mortar Creek, Middle River, Maryland

Site Label	Sample Label	Temperature	pH	Cu	DOC	Hardness	Final Acute Value	Acute CMC	Chronic CCC	Acute Toxic Units	Chronic Toxic Units	Censored Flag
		°C	s.u.	µg/L	mg/L	mg/L CaCO3	(FAV), ug/L	(CMC=FAV/ 2), ug/L	(CCC=FAV/ACR), ug/L	(Acute TU=Cu/CMC)	(Chronic TU=Cu/CCC)	(0 = quantified, 1 = BDL)
FMC AUGUST 2019	SW37A	30.20	7.79	4.9	3.7	110	49.23	24.62	15.29	0.20	0.32	0.00
FMC AUGUST 2019	SW37B	29.80	7.87	4.8	3.7	100	53.78	26.89	16.70	0.18	0.29	0.00
FMC AUGUST 2019	SW37C	30.10	7.92	5.4	3.7	110	58.77	29.38	18.25	0.18	0.30	0.00
FMC AUGUST 2019	SW37D	30.30	7.87	5.4	3.7	110	55.09	27.54	17.11	0.20	0.32	0.00
FMC AUGUST 2019	SW38A	29.60	7.54	5.8	3.6	120	33.56	16.78	10.42	0.35	0.56	0.00
FMC AUGUST 2019	SW38B	29.40	7.50	5.3	3.6	120	31.59	15.79	9.81	0.34	0.54	0.00
FMC AUGUST 2019	SW38C	29.40	7.50	5.4	3.6	120	31.59	15.79	9.81	0.34	0.55	0.00
FMC AUGUST 2019	SW38D	29.40	7.53	5.1	3.6	120	33.01	16.50	10.25	0.31	0.50	0.00
FMC AUGUST 2019	SW39A	28.60	7.29	5.2	3.3	130	21.32	10.66	6.62	0.49	0.79	0.00
FMC AUGUST 2019	SW39B	28.80	7.25	5.2	3.3	130	20.10	10.05	6.24	0.52	0.83	0.00
FMC AUGUST 2019	SW39C	28.80	7.27	5.4	3.3	130	20.72	10.36	6.43	0.52	0.84	0.00
FMC AUGUST 2019	SW39D	28.90	7.26	6.1	3.3	130	20.42	10.21	6.34	0.60	0.96	0.00
FMC AUGUST 2019	SW40A	29.80	7.57	6.0	3.6	120	35.18	17.59	10.93	0.34	0.55	0.00
FMC AUGUST 2019	SW40B	29.60	7.43	5.5	3.6	120	28.51	14.26	8.85	0.39	0.62	0.00
FMC AUGUST 2019	SW40C	29.80	7.54	5.5	3.6	120	33.66	16.83	10.45	0.33	0.53	0.00
FMC AUGUST 2019	SW40D	29.60	7.61	6.1	3.6	120	37.20	18.60	11.55	0.33	0.53	0.00
FMC AUGUST 2019	SW41A	29.40	7.52	5.0	3.4	120	30.71	15.35	9.54	0.33	0.52	0.00
FMC AUGUST 2019	SW41B	29.40	7.51	6.0	3.4	120	30.26	15.13	9.40	0.40	0.64	0.00
FMC AUGUST 2019	SW41C	29.30	7.50	5.2	3.4	120	29.78	14.89	9.25	0.35	0.56	0.00
FMC AUGUST 2019	SW41D	29.40	7.49	6.0	3.4	120	29.38	14.69	9.12	0.41	0.66	0.00
FMC AUGUST 2019	SW42A	29.70	7.59	5.4	3.5	120	35.17	17.58	10.92	0.31	0.49	0.00
FMC AUGUST 2019	SW42B	29.70	7.59	5.7	3.5	120	35.17	17.58	10.92	0.32	0.52	0.00
FMC AUGUST 2019	SW42C	29.80	7.71	5.7	3.5	120	41.89	20.94	13.01	0.27	0.44	0.00
FMC AUGUST 2019	SW42D	29.70	7.68	6.3	3.5	120	40.07	20.03	12.44	0.31	0.51	0.00
FMC AUGUST 2019	SW43A	29.20	7.40	5.4	3.5	120	26.41	13.20	8.20	0.41	0.66	0.00
FMC AUGUST 2019	SW43B	29.20	7.43	5.1	3.5	120	27.61	13.81	8.58	0.37	0.59	0.00
FMC AUGUST 2019	SW43C	29.30	7.44	5.4	3.5	120	28.06	14.03	8.71	0.38	0.62	0.00
FMC AUGUST 2019	SW43D	29.30	7.44	5.6	3.5	120	28.06	14.03	8.71	0.40	0.64	0.00
FMC AUGUST 2019	SW44A	29.00	7.42	5.0	3.5	120	27.16	13.58	8.43	0.37	0.59	0.00
FMC AUGUST 2019	SW44B	29.10	7.39	5.9	3.5	130	26.38	13.19	8.19	0.45	0.72	0.00
FMC AUGUST 2019	SW44C	29.10	7.42	6.1	3.5	130	27.58	13.79	8.57	0.44	0.71	0.00
FMC AUGUST 2019	SW44D	29.20	7.44	5.3	3.5	120	28.03	14.02	8.71	0.38	0.61	0.00
FMC AUGUST 2019	SW45A	28.80	7.56	5.5	3.4	120	32.33	16.16	10.04	0.34	0.55	0.00
FMC AUGUST 2019	SW45B	28.90	7.32	4.8	3.4	130	23.04	11.52	7.15	0.42	0.67	0.00
FMC AUGUST 2019	SW45C	29.00	7.31	5.6	3.4	130	22.71	11.36	7.05	0.49	0.79	0.00
FMC AUGUST 2019	SW45D	29.00	7.31	5.9	3.4	130	22.71	11.36	7.05	0.52	0.84	0.00

Definitions:

BLM– biotic ligand model
CCC– Criterion Continuous Concentration
Cu– copper concentration
CMC– Criterion Maximum Concentration
DOC– dissolved organic carbon
FAV– Final Acute Value
µg/L– micrograms per liter
mg/L— milligrams per liter
ppt– parts per trillion
Sal– salinity
TEMP– temperature

ACUTE CMC GEOMEAN (UG/L)=	15.46
CHRONIC CCC GEOMEAN (UG/L)=	9.60

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AQUATIC LIFE AMBIENT FRESHWATER QUALITY CRITERIA – COPPER 2007 REVISION

EPA is issuing revised national recommended freshwater aquatic life criteria for copper *(Aquatic Life Ambient Freshwater Quality Criteria – Copper 2007 Revision)*. As a companion to the criteria document, EPA is also issuing a document to answer Frequently Asked Questions (FAQs) from states, tribes, permittees, and other interested stakeholders on implementing the revised nationally recommended criteria.

Background

Copper is an abundant naturally occurring trace element found in the earth's crust that is also found in surface waters. Copper is a micronutrient at low concentrations and is essential to virtually all plants and animals. At higher concentrations copper can become toxic to aquatic life. Mining, leather and leather products, fabricated metal products, and electric equipment are a few of the industries with copper-bearing discharges that contribute to manmade discharges of copper into surface waters. Municipal effluents may also contribute additional copper loadings to surface waters.

Since EPA published the hardness-based recommendation for copper criteria in 1984, new data have become available on copper toxicity and its effects on aquatic life. The Biotic Ligand Model (BLM) – a metal bioavailability model that uses receiving water body characteristics to develop site-specific water quality criteria – utilizes the best available science and serves as the basis for the new national recommended criteria.

The BLM requires ten input parameters to calculate a freshwater copper criterion (a saltwater BLM is not yet available): temperature, pH, dissolved organic carbon (DOC), calcium, magnesium, sodium, potassium, sulfate, chloride, and alkalinity. The BLM is used to derive the criteria rather than as a post-derivation adjustment as was the case with the hardness-based criteria. This allows the BLM-based criteria to be customized to the particular water under consideration.

BLM-based criteria can be more stringent than the current hardness-based copper criteria and in certain cases the current hardness-based copper criteria may be overly stringent for particular water bodies. We expect that application of this model will result in more appropriate criteria and eliminate the need for costly, time-consuming site-specific modifications using the water effect ratio.

The FAQs document answers common questions regarding data requirements for the BLM, options to facilitate implementation, monitoring, assessment, and permitting issues, and BLM training opportunities.

Further Information

For more information about the *Aquatic Life Ambient Freshwater Criteria – Copper 2007 Revision*, you may contact Luis Cruz at (202) 566-1095 or Charles Delos at (202) 566-1097, or via mail at the U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, Health and Ecological Criteria Division, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, or you may send an e-mail to cruz.luis@epa.gov or delos.charles@epa.gov.

For more information about the implementation FAQ document, you may contact Christina Jarvis at (202) 566-0537 or Lauren Wisniewski at (202) 566-0394, or via mail at the U.S. Environmental Protection Agency, Office of Water, Office of Science and Technology, Standards and Health Protection Division, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460, or you may send an e-mail to jarvis.christina@epa.gov or wisniewski.lauren@epa.gov.