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

December 23, 2020

VIA EMAIL AND PRIVATE 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 2020 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 of the above-referenced document. This prepared 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
Mary Morningstar, 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 2020 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.

December 2020

Approved by:

Revision: 0



Michael Martin, P.G.
Regional Manager



Josh Mullis
Project Scientist

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ACRONYMS AND ABBREVIATIONS

1,4-DCB	1,4-dichlorobenzene
AWQC	ambient water quality criteria
BTAG	Biological Technical Advisory Group
BTEX	benzene, toluene, ethylbenzene, and xylenes
cis-1,2-DCE	*cis*-1,2-dichloroethene
COMAR	Code of Maryland Regulations
cVOC	chlorinated volatile organic compound
DRA	Dump Road Area
EESH	energy, environment, safety and health
EL	Edwards Lane
GC/MS	gas chromatography/mass spectrometry
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
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 *2020 Surface Water Sampling Work Plan* (Tetra Tech, 2020a). This technical memorandum presents the analytical results for surface water samples collected from Frog Mortar Creek on August 12, 2020.

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

- characterize surface water quality to determine the concentrations and spatial distributions of volatile organic compounds in Frog Mortar Creek
- evaluate the interaction between shallow groundwater and Frog Mortar Creek for numerical modeling
- evaluate the effectiveness of the groundwater treatment system now operating to contain contaminated groundwater at the Dump Road Area
- provide information that can be used to assess ecological risks to aquatic and benthic organisms and 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), located at 701 Wilson Point Road in Middle River, Maryland, is 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) operates MSA on behalf of the Maryland Department of Transportation. The 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 consists mostly of open meadows, mowed grass, and heavily wooded areas (as modified by the construction of the groundwater 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 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 system consists of 16 groundwater extraction wells, underground piping, and a building that houses components to capture and treat groundwater containing volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals. 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 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***—although Maryland does not have a groundwater standard for this compound, 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 1997–2019, 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 *2019 Surface Water Sampling Report for Frog Mortar Creek* (Tetra Tech, 2020b), 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 2020 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 2020 sampling is the fourth of six surface-water sampling rounds planned for 2020. The August sampling round assessed water quality during the end of the summer season, when recreational use of Frog Mortar Creek would be expected.

3.1 SURFACE WATER SAMPLING

3.1.1 Surface Water Sampling and Chemical Analyses

Thirty-two surface water samples were collected from Frog Mortar Creek adjacent to the DRA site on August 12, 2020. Sampling locations are shown in Figure 3-1. Four samples were collected along each of seven transects spaced approximately 350 feet apart along the western shoreline of the creek; these transects are designated MSA-SW37, MSA-SW38, MSA-SW40, MSA-SW41,

MSA-SW42, MSA-SW43, and MSA-SW44. Historically, transects SW39 (the northernmost transect) and SW45 (the southernmost transect) were also included in the sampling program, but these two transects were removed from the sampling program in 2020 as the remaining seven transects fully cover the extent of the targeted area east of the Dump Road Area. In addition, a transect on the eastern shoreline of Frog Mortar Creek, the Edward Lane transect, has also been historically sampled. The Edwards Lane transect (EL-01A through D) was sampled during the June 2020 round; which is the only time it will be sampled this year. Results from the Edwards Lane transect in June 2020 were nondetect.

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 2020 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 located using a handheld global positioning system receiver.

Table 3-1 outlines the sampling and chemical analysis program. Samples from the seven western shoreline transects (MSA-SW37, SW38, SW40, SW41, SW42, SW43, and SW44) and SW46A through SW49A were analyzed for VOCs by USEPA SW846 Method 8260C (including Freon 113 [1,1,2-trichloro-1,2,2-trifluoroethane], Freon 22 [chlorodifluoromethane], and tentatively identified compounds).

Historically, western shoreline samples were also analyzed for hexavalent chromium and dissolved metals; however, these analytes were removed from the 2020 surface water sampling program. 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 (0.64 meters [2.1 feet] at 0834 hours) and after sampling (0.76 meters [2.5 feet] at 1035 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.

No duplicate samples 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 2020 log sheets for surface water samples are in Appendix A. Chain of custody forms, the data-validation report, and the full laboratory report are in Appendix B (on compact disc).

3.1.3 Sample Nomenclature and Handling

Surface water samples collected from western shoreline transects 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. For example, the surface water sample collected on August 12, 2020 from MSA-SW37A is labeled "MSA-SW37A-081220." The trip blank is labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-081220).

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

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

3.1.4 Equipment Decontamination

This project required minimal equipment decontamination. Both dedicated and disposable equipment were used for surface water sampling, to reduce the need for decontamination and 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) consisted of personal protective equipment (PPE) generated during field sampling. PPE IDW was brushed off, placed in trash bags, 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 sample tracking system was used from the beginning to the end of sampling. The field operations leader began and coordinated sample tracking before mobilizing the sampling team to the field. Preprinted sample-container labels generated before fieldwork began were reviewed to ensure that they were accurate and adhered to work plan requirements. The project manager coordinated with the analytical laboratory to ensure that the laboratory was aware of the number and type of samples and analyses that would be submitted.

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

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

3.2.2 Sample Information

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

3.2.3 Project Data Compilation

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

3.2.4 Geographic Information System

Data management systems for this investigation consist of a relational database and geographic information system (GIS) to manage environmental information pertaining to MSA housed in the Lockheed Martin environment, safety and health (ESH) 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 ESH 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 organic data review (USEPA, 2017) and the specifics of the analytical methods used. Data from this sampling event consist of chemical results for surface water samples. Data-validation reports, full laboratory

reports, and chain of custody forms are in Appendix B (on compact disc) as PDF files. A table with all analytical data for August 2020 Frog Mortar Creek surface water samples, including nondetects, is in Appendix C.

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

J The analyte is considered present in the sample but 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.

NJ The analyte was tentatively identified as present, and the reported value is the estimated concentration in the sample.

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 2020 were used to generate a statistical summary table (Table 4-1), a table summarizing positive detections of chemical analytes (Table 4-2), and a comparison table (Table 4-3) showing trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) results from the August 2019, July 2020, and August 2020 sampling rounds. Samples collected from transects, including single-sample transect locations SW46A–SW49A, were analyzed for volatile organic compounds (VOCs) (including fuel-related compounds such as benzene, toluene, ethylbenzene, and xylenes [BTEX] and tentatively identified compounds). Four VOCs were detected at low concentrations during the August 2020 sampling round: acetone, 1,4-dichlorobenzene (1,4-DCB), *cis*-1,2-DCE, and VC. 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)
- site-specific screening levels for swimming developed for TCE*, cis*-1,2-DCE and, VC

Site-specific screening levels for swimming for TCE, *cis*-1,2-DCE, and VC were 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 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.

A table summarizing analytical data, including nondetect results and detection limits, is attached as Appendix C. Since all 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.

4.2 VOLATILE ORGANIC COMPOUND SURFACE WATER SAMPLING RESULTS

Four VOCs (acetone, *cis*-1,2-DCE, 1,4-DCB, and VC) were detected at low concentrations in the August 2020 surface water samples; their analytical results are summarized below and in Tables 4-1 and 4-2, as well as Figures 4-1 and 4-2. Table 4-3 and Figure 4-3 compare August 2020 results for TCE, *cis*-1,2-DCE, and VC to results detected during the previous sampling round (July 2020) and the sampling round from one year ago (August 2019).

A tentatively identified compound (TIC) search was performed for the compound chlorodifluoromethane. Nondetect results were qualified as estimated (UJ) because the gas chromatography/mass spectrometry [GC/MS] machine was not calibrated for this compound, and because the detection limit is an estimated value.

4.2.1 Trichloroethene Results

TCE was not detected during the current sampling round (August 2020) and therefore did not exceed any screening level criteria. The nondetect results observed during this round are consistent with the decreasing trend of TCE in Frog Mortar Creek since March 2019. TCE was detected at five locations (SW43A-C, SW46A, and SW49A) during the March 2019 sampling round, but was nondetect during the remaining five sampling events in 2019 (June, July, August, September, and December), as well as during the first three sampling events this year (March, June, and July 2020).

4.2.2 *cis*-1,2-Dichloroethene Results

cis-1,2-DCE was detected at four of 32 locations in August 2020, with concentrations ranging from 0.42 microgram(s) per liter (µg/L) to 0.72 µg/L (Figure 4-1). *cis*-1,2-DCE did not exceed its lowest screening level (i.e., swimming criterion of 300 µg/L).

cis-1,2-DCE was not detected during the previous two sampling rounds (June and July 2020) or during last year's (August 2019) round and therefore did not exceed its lowest screening level (i.e., the swimming criterion of 300 µg/L). However, *cis*-1,2-DCE was detected at three of 32 locations during the March 2020 sampling round at low estimated (*J*-qualified) concentrations, ranging from 0.22 micrograms per liter (µg/L) to 0.38 µg/L.

When detected in previous rounds, the distributions of *cis*-1,2-DCE in the higher concentration transects tended to decrease with increasing distance from the shore. This trend was last observed in March 2020, as *cis*-1,2-DCE concentrations at transect SW42 decreased with increasing distance from the shore, with concentrations of 0.38 µg/L (SW42A), 0.28 µg/L (SW42B), 0.22 µg/L (SW42C), and nondetect (SW42D). All detected *cis*-1,2-DCE concentrations in August 2020 were located at near-shore locations.

4.2.3 Vinyl Chloride Results

VC was detected at three of 32 sampling locations in August 2020 with concentrations ranging from 0.51 µg/L to 0.61 µg/L (Figure 4-2). VC did not exceed its lowest site-specific screening criterion (swimming) of 0.75 µg/L.

VC was not detected during the previous two sampling rounds (June and July 2020), but was detected at seven of 32 sampling locations in March 2020, with concentrations ranging from 0.21 µg/L to 1.0 µg/L, with the maximum concentration exceeding the swimming criterion (0.75 µg/L) at location SW42A.

VC was also not detected during the August 2019 sampling round. The highest detection of VC in 2019 (3.3 µg/L) did exceed the site-specific screening level, as did two other locations during the March 2019 sampling event. VC was not detected during the remaining sampling rounds in 2019 (i.e., in July, August, September, or December 2019).

When detected in previous rounds, the distributions of VC in the higher concentration transects tended to decrease with increasing distance from the shore. VC was detected at two near-shore sampling locations (SW38A and SW46A) and at one location 150 feet from shore (SW37C) during the August 2020 sampling round. Although VC was nondetect in June and July 2020, this trend was last observed in March 2020, as VC concentrations at transect SW42 decreased with increasing distance from the shore, with concentrations of 1.0 µg/L (SW42A), 0.64 µg/L (SW42B), 0.50 µg/L (SW42C), and 0.26 µg/L (SW42D).

4.2.4 Tentatively Identified Compound Results

As stated earlier, a search was performed for one TIC (chlorodifluoromethane), but it was not detected. Nondetect results for chlorodifluoromethane were qualified as estimated (UJ) because the detection limit is an estimated value.

SECTION 5
SUMMARY

The Lockheed Martin Corporation August 2020 Frog Mortar Creek surface-water investigation results are summarized below:

- Thirty-two surface water samples were collected on August 12, 2020, 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 seven transects spaced approximately 350 feet apart (for 28 samples) along the western shoreline of Frog Mortar Creek. 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).
- Samples collected in August 2020 from Frog Mortar Creek were analyzed for volatile organic compounds (VOCs).
- 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, 2017), 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; and (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).
- Four VOCs, including vinyl chloride, *cis*-1,2-dichloroethene, 1,4-dichlorobenzene, and acetone, were detected at low concentrations in the August 2020. All detected concentrations were below respective water quality screening criteria.
- The next surface water sampling event will occur in September 2020.

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

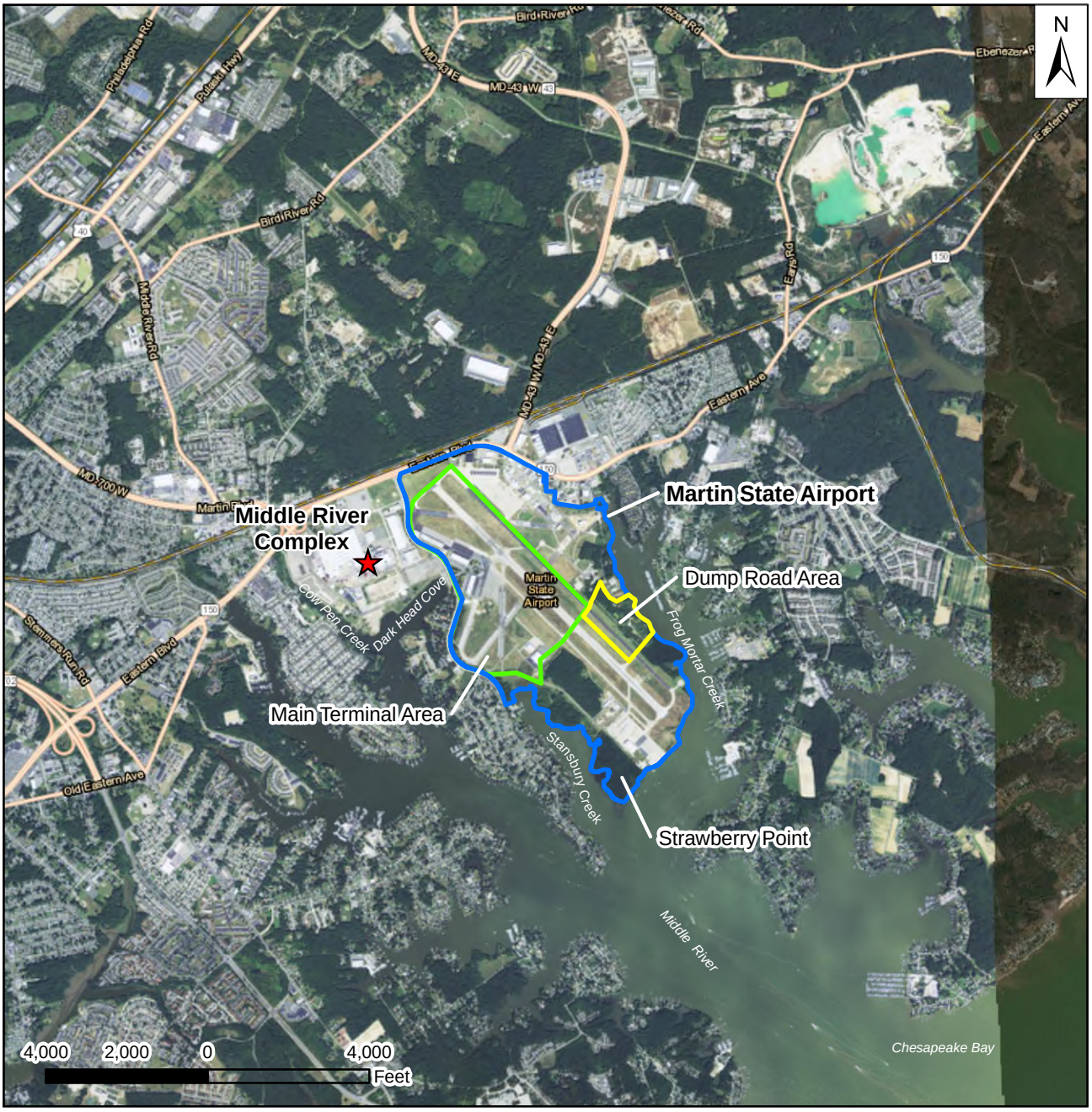
Figure 2-2 Site Features and Areas of Concern, Dump Road Area

Figure 3-1 August 2020 Surface Water Sampling Locations, Frog Mortar Creek

Figure 4-1 Concentrations of cis-1,2-Dichloroethene in Surface Water Samples, August 2020

Figure 4-2 Concentrations of Vinyl Chloride in Surface Water Samples, August 2020

Figure 4-3 Concentrations of Trichloroethene, cis-1,2-Dichloroethene, and Vinyl Chloride along Surface Water Sampling Transects for August 2019, July 2020, and August 2020, Frog Mortar Creek



Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2013 ESRI and its data suppliers).

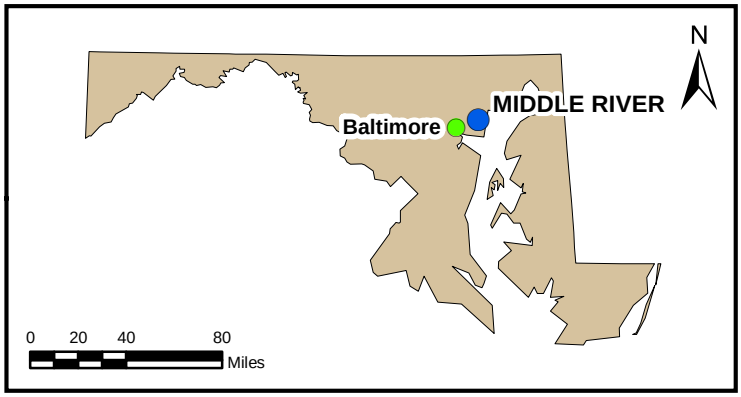


FIGURE 1-1

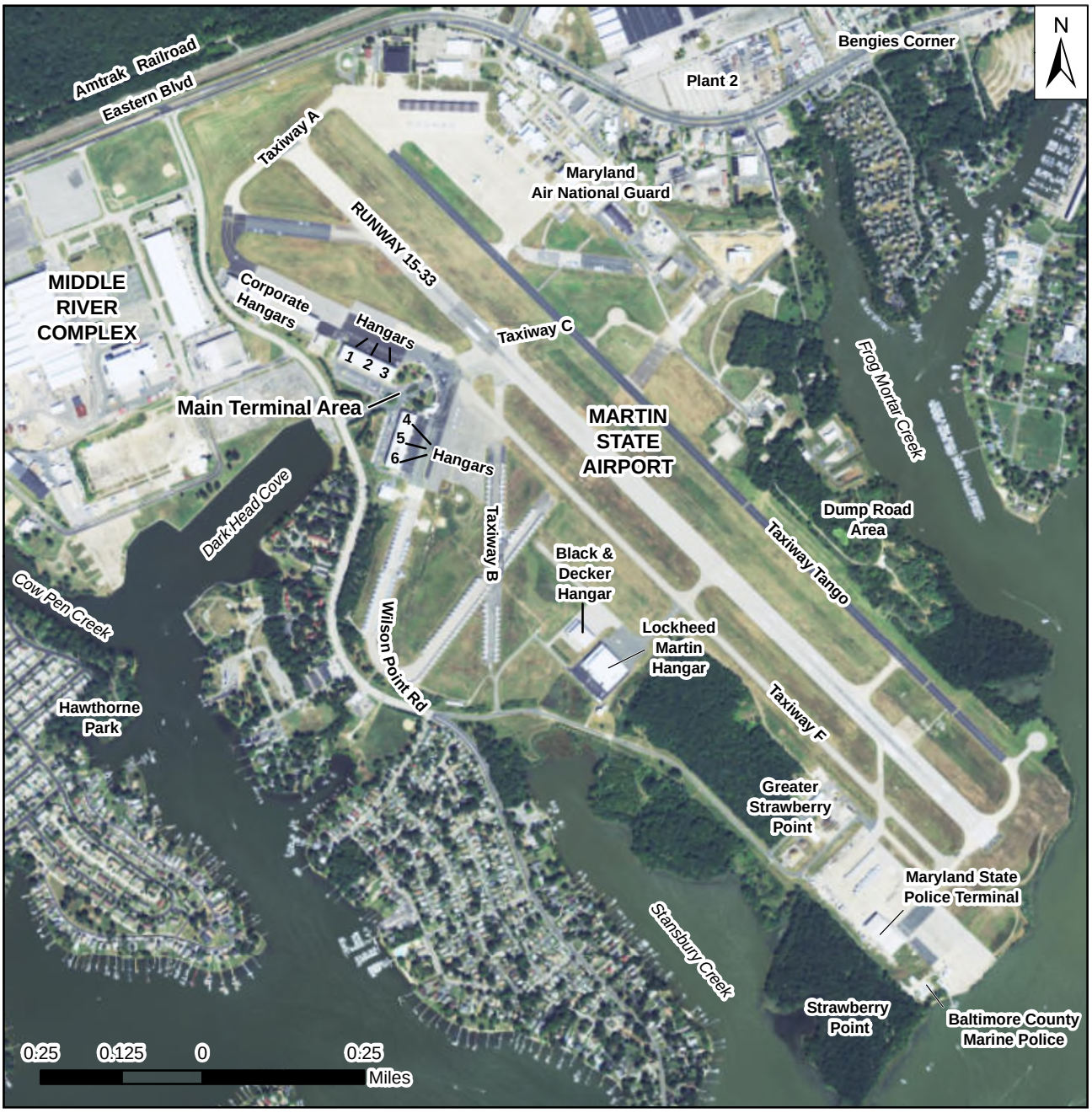
MARTIN STATE AIRPORT
SITE LOCATION MAP

Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
12/16/15	JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\msa_overview_dec2015.mxd)
12/16/15 -- JEE



Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2013 ESRI and its data suppliers).

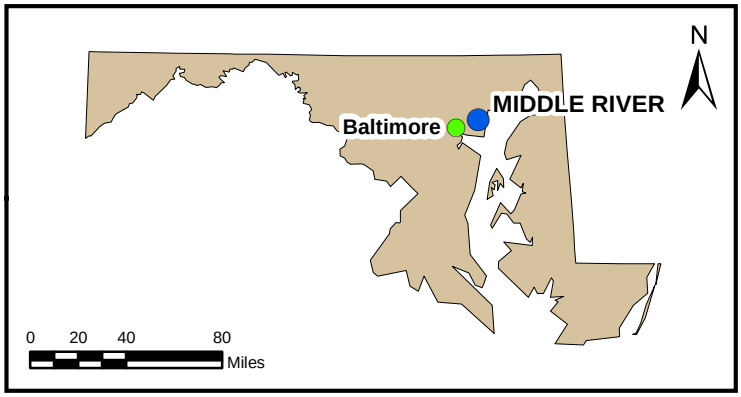


FIGURE 2-1

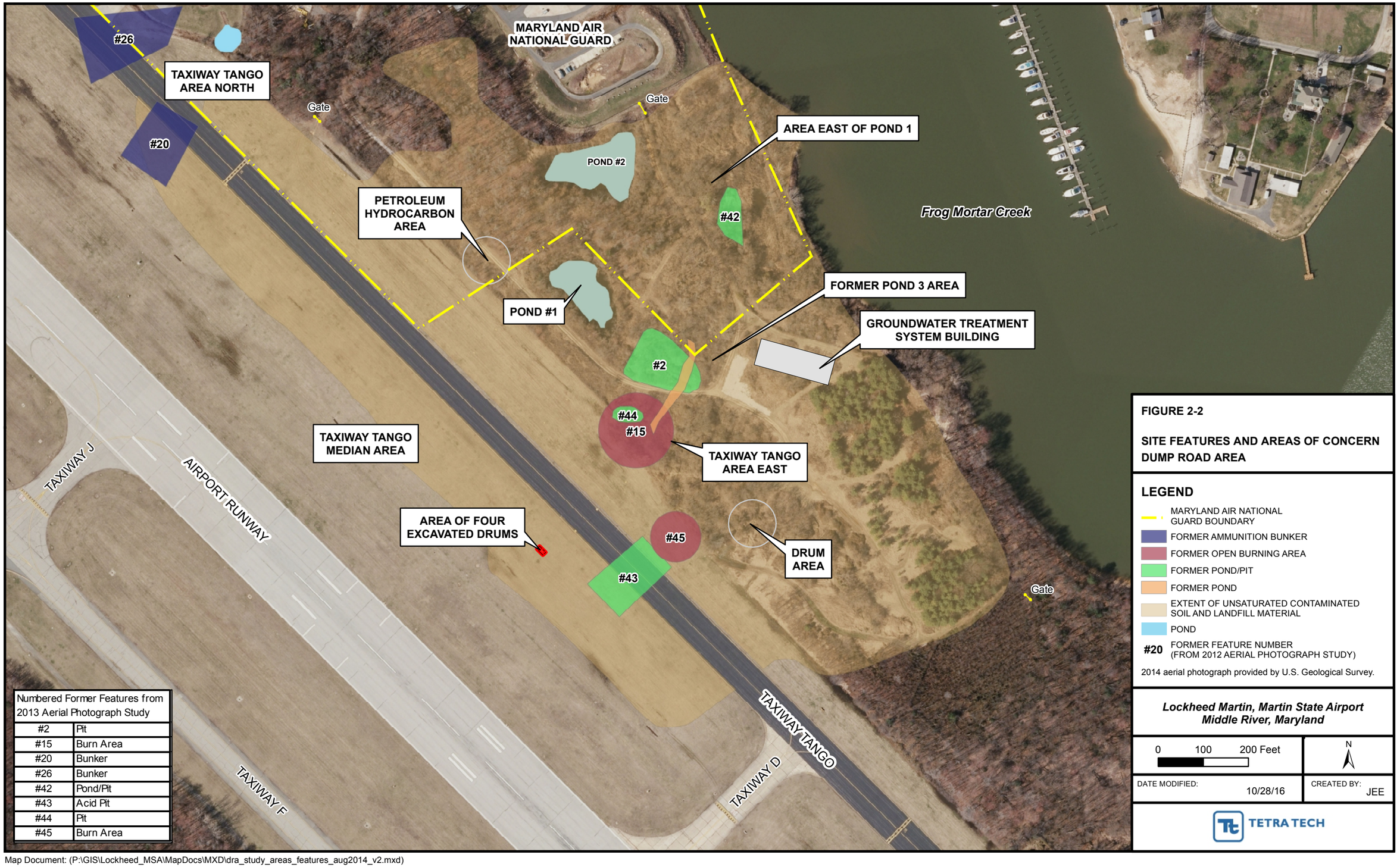
MARTIN STATE AIRPORT AND SURROUNDING FEATURES

Lockheed Martin, Martin State Airport
Middle River, Maryland

DATE MODIFIED:	CREATED BY:
08/27/15	JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\msa_features_sitemap_jul2015.mxd)
08/27/15 -- 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)

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

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 Feet

N

DATE MODIFIED: 10/28/16

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Lockheed_MSA\MapDocs\MXD\dra_study_areas_features_aug2014_v2.mxd)
10/28/16 -- JEE



FIGURE 3-1

AUGUST 2020 SURFACE WATER SAMPLING LOCATIONS FROG MORTAR CREEK

LEGEND

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

2017 aerial photograph provided by the State of Maryland.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 10/29/20

CREATED BY: PFO

TETRA TECH

Map Document: GER (K:\Patrick\GIS\Lockheed_MSA\MapDocs\MXDs\fmc_sw_samplocs_aug2020.mxd)
10/29/20 -- PFO



FIGURE 4-1

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2020 FROG MORTAR CREEK

LEGEND

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

(0.5) = cis-1,2-dichloroethene concentration
(--) = Analyte not detected
J = Estimated Value
All concentrations are in micrograms per liter (µg/L)

All detected concentrations are below lowest screening criterion (200 µg/L)

2017 aerial photograph provided by the State of Maryland.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 11/03/20

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TETRA TECH

Map Document: GER (K:\Patrick\GIS\Lockheed_MSA\MapDocs\MXDs\fmc_sw_cis12dce_results_oct2020.mxd)
11/03/20 -- PFO



FIGURE 4-2

CONCENTRATIONS OF VINYL CHLORIDE IN SURFACE WATER SAMPLES, AUGUST 2020 FROG MORTAR CREEK

LEGEND

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

(0.56) = vinyl chloride concentration
(--) = Analyte not detected
J = Estimated Value
All concentrations are in micrograms per liter (µg/L)

All detected concentrations are below lowest screening criterion (0.75 µg/L)

2017 aerial photograph provided by the State of Maryland.

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 150 300 Feet

N

DATE MODIFIED: 11/03/20

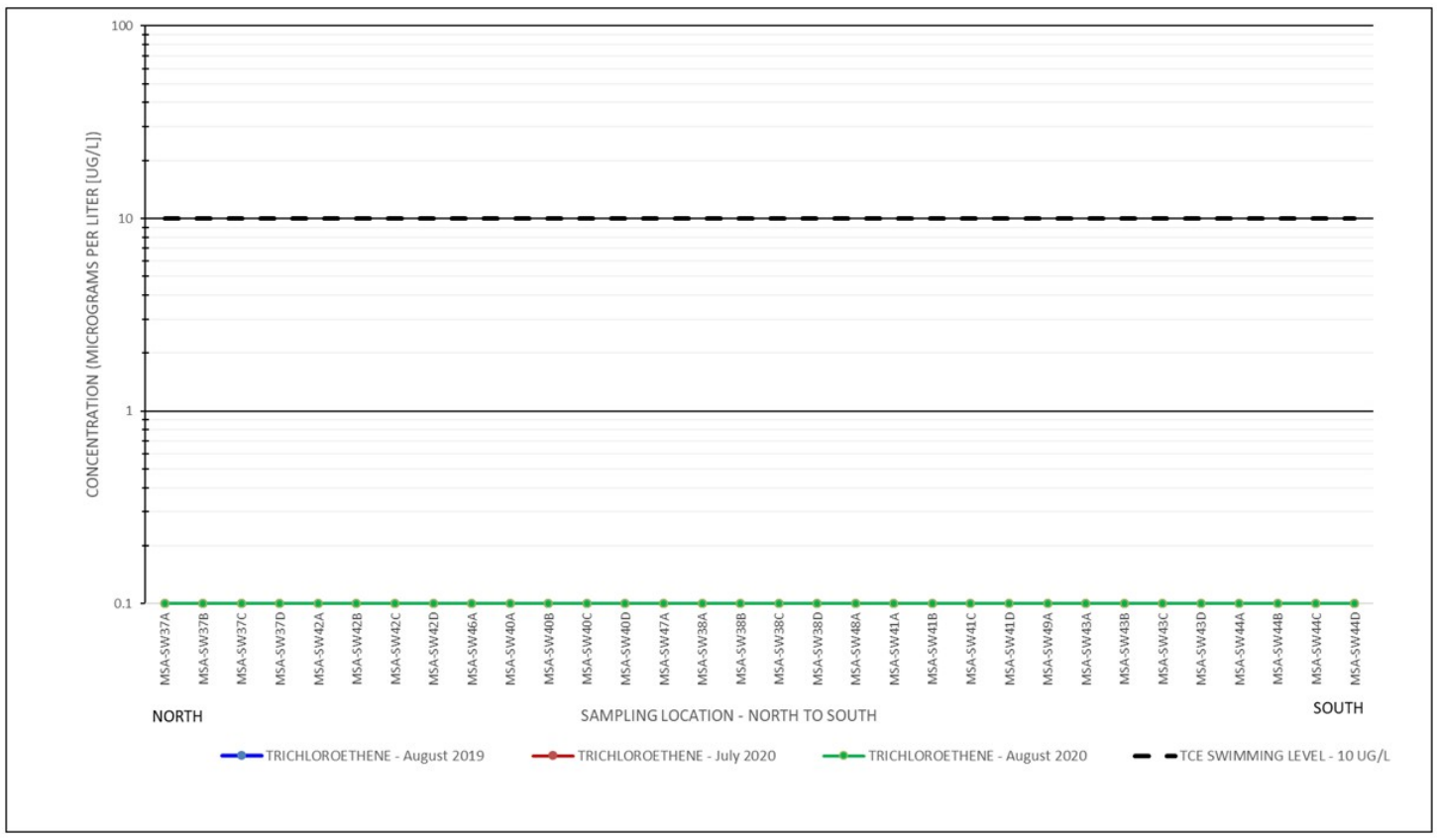
CREATED BY: PFO

TETRA TECH

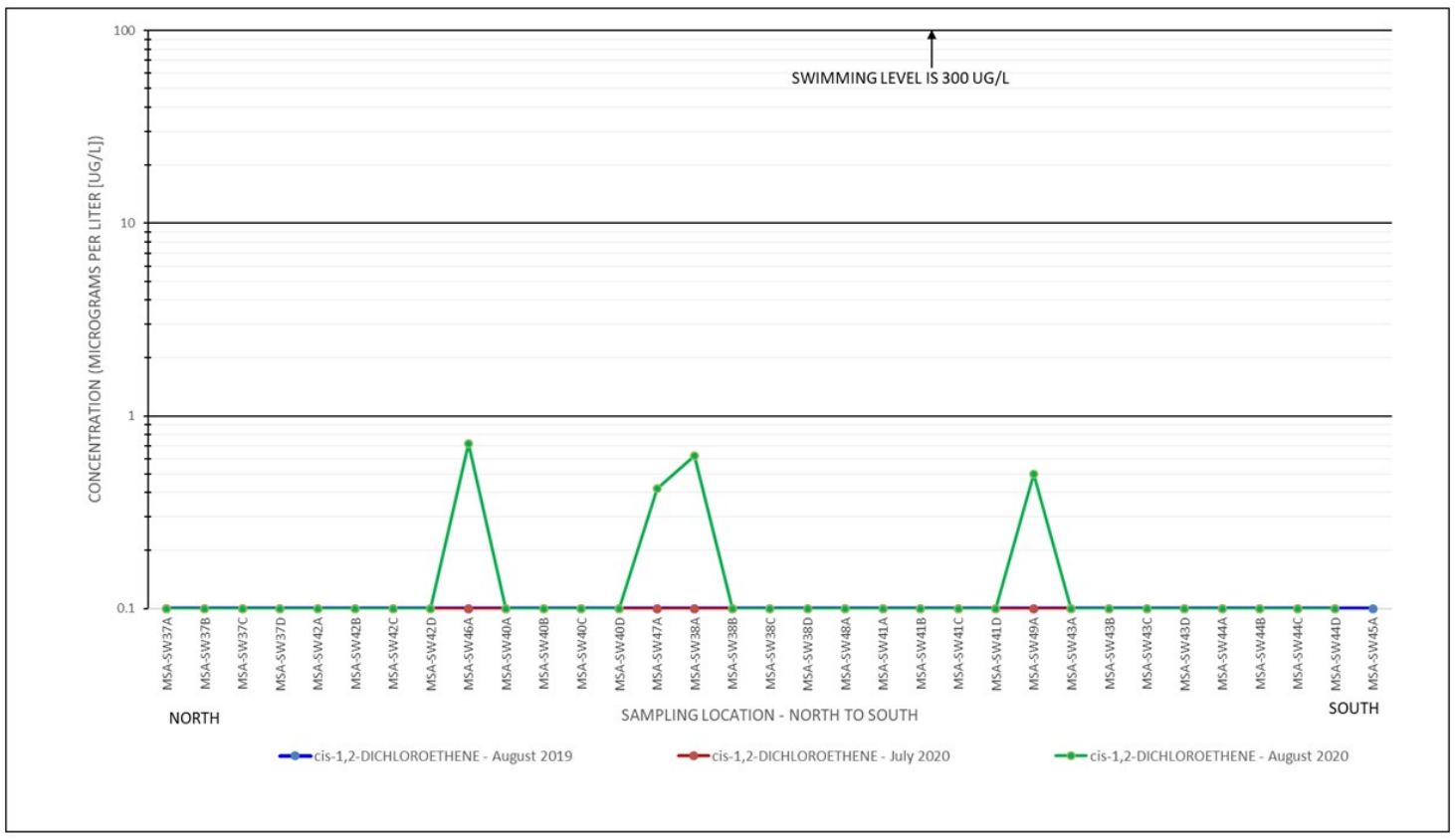
Map Document: GER (K:\Patrick\GIS\Lockheed_MSA\MapDocs\MXDs\fmc_sw_vc_results_oct2020.mxd)
11/03/20 -- PFO

C:\Users\josh.mullis\Desktop\MSA SW 2020 reports\June 2020 report

TRICHLOROETHENE



CIS-1,2-DICHLOROETHENE



VINYL CHLORIDE

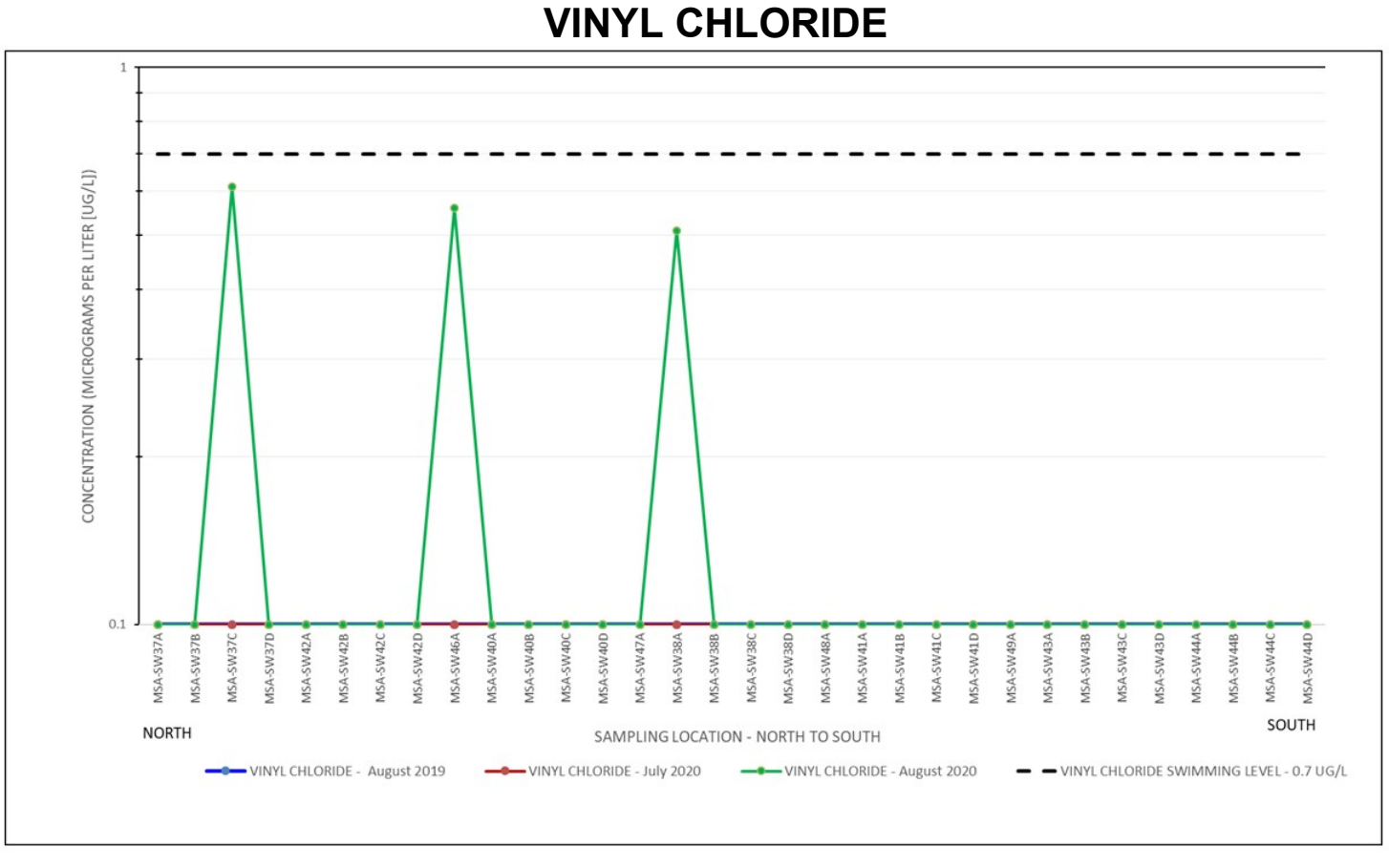


FIGURE 4-3

CONCENTRATIONS OF TRICHLOROETHENE, cis-1,2-DICHLOROETHENE AND VINYL CHLORIDE ALONG SURFACE WATER SAMPLING TRANSECTS FOR AUGUST 2019, JULY 2020, AND AUGUST 2020 FROG MORTAR CREEK

Lockheed Martin, Martin State Airport Middle River, Maryland

DATE MODIFIED:	CREATED BY:
10/30/2020	JAM

TETRA TECH

TABLES

Table 3-1 List of Samples and Chemical Analyses for Surface Water—August 2020

Table 4-1 Statistical Summary of Analytes Detected in Surface Water Samples—August 2020

Table 4-2 Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2020

Table 4-3 Comparison of Primary Volatile Organic Compound Results Detected in Surface Water for the August 2019, July 2020, and August 2020 Sampling Rounds

Table 3-1
List of Samples and Chemical Analyses for Surface Water—August 2020
Frog Mortar Creek, Martin State Airport
Middle River, Maryland

Surface water sampling location/ Transect No.[1]	Analytical Requirements Volatile organic compounds (USEPA SW846 8260C) 3 × 40 mL vials with hydrochloric acid
MSA-SW37	X
MSA-SW38	X
MSA-SW40	X
MSA-SW41	X
MSA-SW42	X
MSA-SW43	X
MSA-SW44	X
MSA-SW46	X
MSA-SW47	X
MSA-SW48	X
MSA-SW49	X
EL-SW01[2]	X[2]

1. Four samples, at locations -A, -B, -C, and -D, were collected from each transect, except for sampling locations SW46, SW47, SW48, and SW49, where only western shore "A" samples were collected. See Section 3.1.3 for sample nomenclature/sample ID.

2. The Edwards Lane (EL) transect was only sampled in June 2020.

mL – milliliter

USEPA – United States Environmental Protection Agency

Table 4-1
Statistical Summary of Analytes Detected in Surface Water Samples--August 2020
Frog Mortar Creek, Martin State Airport
Middle River, Maryland

Parameter	August 2020 Frog Mortar Creek Surface Water Samples									
	Frequency of Detection		Minimum concentration detected	Maximum concentration detected	Location of maximum detected concentration	Average of detected results	Average of all results	Minimum concentration nondetects	Maximum concentration nondetects	Standard deviation
	Number	Percent								
1,4-Dichlorobenzene	1/32	3	0.46 J	0.46 J	MSA-SW38A	0.46	0.193593	0.37	0.37	0.0486136
Acetone	28/32	88	5.7 J	17 J	MSA-SW37A	8.732142	7.978125	5.4	5.4	3.040027
cis -1,2-Dichloroethene	4/32	13	0.42 J	0.72 J	MSA-SW46A	0.565	0.236875	0.38	0.38	0.1325297
Vinyl chloride	3/32	9	0.51	0.61	MSA-SW37C	0.56	0.279062	0.5	0.5	0.0926791

All samples were collected on August 12, 2020
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

Table 4-2
Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2020
Frog Mortar Creek, Martin State Airport
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-SW37A	MSA-SW37B	MSA-SW37C	MSA-SW37D	MSA-SW38A	MSA-SW38B	MSA-SW38C	MSA-SW38D
SAMPLE ID						MSA-SW37A-081220	MSA-SW37B-081220	MSA-SW37C-081220	MSA-SW37D-081220	MSA-SW38A-081220	MSA-SW38B-081220	MSA-SW38C-081220	MSA-SW38D-081220
SAMPLE DATE	Acute	Chronic				20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
Volatile organic compounds (µg/L)													
1,4-Dichlorobenzene	NA	NA	26	900	NA	--	--	--	--	0.46 J	--	--	--
Acetone	NA	NA	1500	NA	NA	17 J	6.7 J	6.6 J	6.4 J	9.3 J	8.4 J	--	6.7 J
cis -1,2-Dichloroethene	NA	NA	590	590	300	--	--	--	--	0.62 J	--	--	--
Vinyl chloride	NA	NA	930	24	0.75	--	--	0.61	--	0.51	--	--	--

AWQCFA_EC\WQCFC_EC R3SWFW AWQCHHO

All samples were collected on August 12, 2020.

1 National Recommended Water Quality Criteria, https://www.epa.gov/wqc/national-recommended-water-quality-criteria and Maryland Numerical Criteria for Toxic Substances in Surface Waters, COMAR 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm
2 USEPA Region 3 Biological Technical Advisory Group Freshwater Screening Benchmarks (USEPA 2006).
3 For carcinogens, criterion is for incremental cancer risk of $1x10^{-5}$.

4 Site-specific swimming screening levels were developed in 2018 for trichloroethene, cis-1,2-dichloroethene, and vinyl chloride approved by the Maryland Department of the Environment in 2019.
Gray shading indicates the value exceeds at least one of the screening criteria.
-- - Not detected at the method detectic NA - not available
BTAG - Biological Technical Assistance NJ - tentatively identified at estimated concentration
COMAR- Code of Maryland Regulation SW - surface water
J - estimated concentration µg/L - micrograms per liter
USEPA - United States Environmental Protection Agency

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-SW40A	MSA-SW40B	MSA-SW40C	MSA-SW40D	MSA-SW41A	MSA-SW41B	MSA-SW41C	MSA-SW41D
SAMPLE ID						MSA-SW40A-081220	MSA-SW40B-081220	MSA-SW40C-081220	MSA-SW40D-081220	MSA-SW41A-081220	MSA-SW41B-081220	MSA-SW41C-081220	MSA-SW41D-081220
SAMPLE DATE	Acute	Chronic				20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
Volatile organic compounds (µg/L)													
1,4-Dichlorobenzene	NA	NA	26	900	NA	--	--	--	--	--	--	--	--
Acetone	NA	NA	1500	NA	NA	10 J	7.2 J	8 J	5.7 J	9.2 J	8.7 J	7.1 J	--
cis -1,2-Dichloroethene	NA	NA	590	590	300	--	--	--	--	--	--	--	--
Vinyl chloride	NA	NA	930	24	0.75	--	--	--	--	--	--	--	--

AWQCFA_EC\WQCFC_EC R3SWFW AWQCHHO

All samples were collected on August 12, 2020.

1 National Recommended Water Quality Criteria, https://www.epa.gov/wqc/national-recommended-water-quality-criteria and Maryland Numerical Criteria for Toxic Substances in Surface Waters, COMAR 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm
2 USEPA Region 3 Biological Technical Advisory Group Freshwater Screening Benchmarks (USEPA 2006).
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BTAG - Biological Technical Assistance NJ - tentatively identified at estimated concentration
COMAR- Code of Maryland Regulation SW - surface water
J - estimated concentration µg/L - micrograms per liter
USEPA - United States Environmental Protection Agency

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-SW42A	MSA-SW42B	MSA-SW42C	MSA-SW42D	MSA-SW43A	MSA-SW43B	MSA-SW43C	MSA-SW43D
SAMPLE ID						MSA-SW42A-081220	MSA-SW42B-081220	MSA-SW42C-081220	MSA-SW42D-081220	MSA-SW43A-081220	MSA-SW43B-081220	MSA-SW43C-081220	MSA-SW43D-081220
SAMPLE DATE	Acute	Chronic				20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
Volatile organic compounds (µg/L)													
1,4-Dichlorobenzene	NA	NA	26	900	NA	--	--	--	--	--	--	--	--
Acetone	NA	NA	1500	NA	NA	11	8.1 J	7.6 J	--	10 J	9.1 J	7.1 J	6.7 J
cis -1,2-Dichloroethene	NA	NA	590	590	300	--	--	--	--	--	--	--	--
Vinyl chloride	NA	NA	930	24	0.75	--	--	--	--	--	--	--	--

AWQCFA_EC\WQCFC_EC R3SWFW AWQCHHO

All samples were collected on August 12, 2020.

1 National Recommended Water Quality Criteria, https://www.epa.gov/wqc/national-recommended-water-quality-criteria and Maryland Numerical Criteria for Toxic Substances in Surface Waters, COMAR 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm
2 USEPA Region 3 Biological Technical Advisory Group Freshwater Screening Benchmarks (USEPA 2006).
3 For carcinogens, criterion is for incremental cancer risk of $1x10^{-5}$.

4 Site-specific swimming screening levels were developed in 2018 for trichloroethene, cis-1,2-dichloroethene, and vinyl chloride approved by the Maryland Department of the Environment in 2019.
Gray shading indicates the value exceeds at least one of the screening criteria.
-- - Not detected at the method detectic NA - not available
BTAG - Biological Technical Assistance NJ - tentatively identified at estimated concentration
COMAR- Code of Maryland Regulation SW - surface water
J - estimated concentration µg/L - micrograms per liter
USEPA - United States Environmental Protection Agency

Table 4-2
Detected Analytes and Screening-Level Exceedances in Surface Water Samples—August 2020
Frog Mortar Creek, Martin State Airport
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-SW44A	MSA-SW44B	MSA-SW44C	MSA-SW44D	MSA-SW46A	MSA-SW47A	MSA-SW48A	MSA-SW49A
SAMPLE ID						MSA-SW44A-081220	MSA-SW44B-081220	MSA-SW44C-081220	MSA-SW44D-081220	MSA-SW46A-081220	MSA-SW47A-081220	MSA-SW48A-081220	MSA-SW49A-081220
SAMPLE DATE	Acute	Chronic				20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
Volatile organic compounds (µg/L)													
1,4-Dichlorobenzene	NA	NA	26	900	NA	--	--	--	--	--	--	--	--
Acetone	NA	NA	1500	NA	NA	10 J	6.6 J	6.3 J	--	12 J	10 J	11 J	12 J
cis -1,2-Dichloroethene	NA	NA	590	590	300	--	--	--	--	0.72 J	0.42 J	--	0.5 J
Vinyl chloride	NA	NA	930	24	0.75	--	--	--	--	0.56	--	--	--

AWQCFA_EC\WQCFC_EC R3SWFW AWQCHHO

All samples were collected on August 12, 2020.

1 National Recommended Water Quality Criteria, https://www.epa.gov/wqc/national-recommended-water-quality-criteria and Maryland Numerical Criteria for Toxic Substances in Surface Waters, COMAR 26.08.02.03, http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm
2 USEPA Region 3 Biological Technical Advisory Group Freshwater Screening Benchmarks (USEPA 2006).
3 For carcinogens, criterion is for incremental cancer risk of $1x10^{-5}$.

4 Site-specific swimming screening levels were developed in 2018 for trichloroethene, cis-1,2-dichloroethene, and vinyl chloride approved by the Maryland Department of the Environment in 2019.
Gray shading indicates the value exceeds at least one of the screening criteria.
-- - Not detected at the method detectic NA - not available
BTAG - Biological Technical Assistance NJ - tentatively identified at estimated concentration
COMAR- Code of Maryland Regulation SW - surface water
J - estimated concentration µg/L - micrograms per liter
USEPA - United States Environmental Protection Agency

Table 4-3

Comparison of Primary Volatile Organic Compound Results Detected in Surface Water for the August 2019, July 2020, and August 2020 Sampling Rounds

Frog Mortar Creek, Martin State Airport

Middle River, Maryland

	Trichloroethene concentrations (µg/L)			cis-1,2-Dichloroethene concentrations (µg/L)			Vinyl chloride concentrations (µg/L)		
Date	**08/08/19**	**07/14/20**	**08/12/20**	**08/08/19**	**07/14/20**	**08/12/20**	**08/08/19**	**07/14/20**	**08/12/20**
Average-Detections	--	--	--	--	--	**0.565**	--	--	**0.56**
Average-All Samples[(1)]	**0.05**	**0.05**	**0.18**	**0.08**	**0.08**	**0.2369**	**0.1**	**0.1**	**0.2791**
Maximum Concentration	--	--	--	--	--	**0.72**	--	--	**0.61**
No. of Detections/Samples	**0/44**	**0/32**	**0/32**	**0/44**	**0/32**	**4/32**	**0/44**	**0/32**	**3/32**
EL-SW01A	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
EL-SW01B	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
EL-SW01C	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
EL-SW01D	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW37A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW37B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW37C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.61
MSA-SW37D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW38A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.62 J	0.2 U	0.2 U	0.51
MSA-SW38B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW38C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW38D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW39A	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW39B	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW39C	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW39D	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW40A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW40B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW40C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW40D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW41A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW41B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW41C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW41D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW42A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW42B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW42C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW42D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW43A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW43B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW43C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW43D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW44A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW44B	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW44C	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW44D	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW45A	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW45B	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW45C	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW45D	0.1 U	NA	NA	0.16 U	NA	NA	0.2 U	NA	NA
MSA-SW46A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.72 J	0.2 U	0.2 U	0.56
MSA-SW47A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.42 J	0.2 U	0.2 U	0.5 U
MSA-SW48A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.38 U	0.2 U	0.2 U	0.5 U
MSA-SW49A	0.1 U	0.1 U	0.36 U	0.16 U	0.16 U	0.5 J	0.2 U	0.2 U	0.5 U

[1] When calculating averages for all samples, 1/2 sample quantitation limit (for non-detects) or 1/2 detection limit (for B-qualified data) are used as proxy concentrations.

J - estimated value
µg/L - micrograms per liter
NA - Not Analyzed
U - not detected; the analyte is considered not detected at the reported value

APPENDICES

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

Appendix B—Data-Validation and Full Laboratory Reports

Appendix C—Chemical-Results Data Table

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

Water Quality Field Parameters-August 2020
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River Maryland

Sample ID		Date	Time	pH	Specific conductance (S.C.)	Temperature (Temp.)	Turbidity	Dissolved oxygen (DO)	Salinity	Oxidation-reduction potential (ORP)	Water Depth
Location	Date ID	mo/day/year	24-hour units	Standard unit (S.U.)	MilliSiemens per centimeter (mS/cm)	Degrees Celsius (^{o}C)	Nephelometric turbidity unit (NTU)	Milligrams per liter (mg/L)	Parts per thousand (ppt)	MilliVolts (mV)	Meters
MSA-SW37A	-081220	8/12/2020	1018	5.76	0.47	28.2	14.15	3.91	0.2	81	1.50
MSA-SW37B	-081220	8/12/2020	1021	5.69	0.50	28.6	10.66	4.64	0.2	81	3.40
MSA-SW37C	-081220	8/12/2020	1023	5.70	0.58	28.8	10.55	4.67	0.3	81	4.00
MSA-SW37D	-081220	8/12/2020	1025	5.67	0.64	28.8	11.02	4.62	0.3	86	5.00
MSA-SW38A	-081220	8/12/2020	933	5.86	1.12	28.84	14.14	3.76	0.6	106	1.80
MSA-SW38B	-081220	8/12/2020	936	5.83	1.34	28.99	13.29	4.36	0.7	109	4.00
MSA-SW38C	-081220	8/12/2020	939	5.87	1.36	29.23	14.07	4.30	0.7	108	>5.0
MSA-SW38D	-081220	8/12/2020	941	5.87	1.51	29.27	13.56	4.06	0.7	110	4.60
MSA-SW40A	-081220	8/12/2020	951	5.82	1.12	29.31	15.34	5.21	0.50	96	1.70
MSA-SW40B	-081220	8/12/2020	953	5.87	1.19	29.38	13.86	4.95	0.60	101	2.50
MSA-SW40C	-081220	8/12/2020	956	5.93	1.56	29.85	12.21	5.29	0.80	104	4.50
MSA-SW40D	-081220	8/12/2020	959	5.98	2.05	30.41	13.13	5.18	1.00	108	>5.0
MSA-SW41A	-081220	8/12/2020	917	5.83	1.36	28.81	12.80	4.46	0.70	110	1.70
MSA-SW41B	-081220	8/12/2020	920	5.83	1.61	29.32	12.76	4.71	0.80	113	2.50
MSA-SW41C	-081220	8/12/2020	922	5.93	1.79	29.59	12.65	4.28	0.90	115	3.50
MSA-SW41D	-081220	8/12/2020	925	5.93	1.85	29.74	11.80	4.77	0.90	116	>5.0
MSA-SW42A	-081220	8/12/2020	1006	5.79	0.47	29.48	13.88	4.41	0.20	84	2.00
MSA-SW42B	-081220	8/12/2020	1008	5.73	0.54	28.64	11.94	4.42	0.30	89	3.90
MSA-SW42C	-081220	8/12/2020	1010	5.72	0.74	29.59	12.73	4.95	0.40	94	4.90
MSA-SW42D	-081220	8/12/2020	1013	5.84	1.51	29.90	11.43	5.53	0.80	96	>5.0
MSA-SW43A	-081220	8/12/2020	903	5.83	1.23	28.61	14.84	4.14	0.60	127	2.00
MSA-SW43B	-081220	8/12/2020	905	5.80	1.11	28.75	14.17	4.45	0.60	118	3.10
MSA-SW43C	-081220	8/12/2020	907	5.85	1.74	29.25	13.75	4.71	0.90	122	4.90
MSA-SW43D	-081220	8/12/2020	910	5.93	1.81	29.48	12.46	4.29	0.90	124	>5.0
MSA-SW44A	-081220	8/12/2020	847	5.57	0.84	28.55	14.80	4.80	0.40	140	1.40
MSA-SW44B	-081220	8/12/2020	851	5.72	1.45	29.08	13.12	4.95	0.70	140	2.60
MSA-SW44C	-081220	8/12/2020	854	5.87	1.91	29.46	12.20	5.12	0.80	139	4.70
MSA-SW44D	-081220	8/12/2020	858	5.95	2.02	29.82	10.97	5.12	1.00	139	>5.0
MSA-SW46A	-081220	8/12/2020	1002	3.92	0.52	28.61	14.20	4.45	0.30	97	2.10
MSA-SW47A	-081220	8/12/2020	946	5.82	1.02	28.65	15.87	3.92	0.50	104	2.50
MSA-SW48A	-081220	8/12/2020	929	5.97	1.32	29.15	14.03	4.55	0.70	112	1.30
MSA-SW49A	-081220	8/12/2020	914	5.85	1.16	28.65	13.97	3.53	0.60	116	2.60

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW37A -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1018								
Depth:	1 ft below water	**clear**	**5.76**	**0.465**	**28.21**	**14.15**	**3.91**	**0.2**	**81**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW37B -081220
Sample Location: MSA-SW37B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1021								
Depth:	1 ft below water	**clear**	**5.69**	**0.497**	**28.64**	**10.66**	**4.64**	**0.2**	**81**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 3.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW37C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1023								
Depth:	1 ft below water	**clear**	**5.7**	**0.575**	**28.82**	**10.55**	**4.67**	**0.3**	**81**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW37D -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1025								
Depth:	1 ft below water	**clear**	**5.67**	**0.638**	**28.79**	**11.02**	**4.62**	**0.3**	**86**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW38A -081220
Sample Location: MSA-SW38A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	933								
Depth:	1 ft below water	**clear**	**5.86**	**1.12**	**28.84**	**14.14**	**3.76**	**0.6**	**106**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.8 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.: 112IC09023

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

Sample ID No.: MSA-SW38B -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	936								
Depth:	1 ft below water	**clear**	**5.83**	**1.34**	**28.99**	**13.29**	**4.36**	**0.7**	**109**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW38C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	939								
Depth:	1 ft below water	**clear**	**5.87**	**1.36**	**29.23**	**14.07**	**4.3**	**0.7**	**108**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >5.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW38D -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	941								
Depth:	1 ft below water	**clear**	**5.87**	**1.51**	**29.27**	**13.56**	**4.06**	**0.7**	**110**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4.6 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.: 112IC09023

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

Sample ID No.: MSA-SW40A -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	951								
Depth:	1 ft below water	**clear**	**5.82**	**1.12**	**29.31**	**15.34**	**5.21**	**0.5**	**96**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	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

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW40B -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	953								
Depth:	1 ft below water	**clear**	**5.87**	**1.19**	**29.38**	**13.86**	**4.95**	**0.6**	**101**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW40C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	956								
Depth:	1 ft below water	**clear**	**5.93**	**1.56**	**29.85**	**12.21**	**5.29**	**0.8**	**104**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4.5 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.: 112IC09023

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

Sample ID No.: MSA-SW40D -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	959								
Depth:	1 ft below water	**clear**	**5.98**	**2.05**	**30.41**	**13.13**	**5.18**	**1.0**	**108**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >5.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW41A -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	917								
Depth:	1 ft below water	**clear**	**5.83**	**1.36**	**28.81**	**12.80**	**4.46**	**0.7**	**110**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs + TICs	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

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW41B -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	920								
Depth:	1 ft below water	**clear**	**5.83**	**1.61**	**29.32**	**12.76**	**4.71**	**0.8**	**113**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW41C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	922								
Depth:	1 ft below water	**clear**	**5.93**	**1.79**	**29.59**	**12.65**	**4.28**	**0.9**	**115**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 3.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW41D -081220
Sample Location: MSA-SW41D
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	925								
Depth:	1 ft below water	**clear**	**5.93**	**1.85**	**29.74**	**11.80**	**4.77**	**0.9**	**116**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >5.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW42A -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1006								
Depth:	1 ft below water	**clear**	**5.79**	**0.47**	**29.48**	**13.88**	**4.41**	**0.2**	**84**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW42B -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1008								
Depth:	1 ft below water	**clear**	**5.73**	**0.54**	**28.64**	**11.94**	**4.42**	**0.3**	**89**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 3.9 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW42C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1010								
Depth:	1 ft below water	clear	5.72	0.74	29.59	12.73	4.95	0.4	94
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4.9 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW42D -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1013								
Depth:	1 ft below water	**clear**	**5.84**	**1.51**	**29.90**	**11.43**	**5.53**	**0.8**	**96**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >5.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

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SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW43A -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	903								
Depth:	1 ft below water	**clear**	**5.83**	**1.23**	**28.61**	**14.84**	**4.14**	**0.6**	**127**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW43B -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	905								
Depth:	1 ft below water	**clear**	**5.80**	**1.11**	**28.75**	**14.17**	**4.45**	**0.6**	**118**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 3.1 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW43C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	907								
Depth:	1 ft below water	**clear**	**5.85**	**1.74**	**29.25**	**13.75**	**4.71**	**0.9**	**122**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4.9 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW43D -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	910								
Depth:	1 ft below water	**clear**	**5.93**	**1.81**	**29.48**	**12.46**	**4.29**	**0.9**	**124**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >5.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW44A -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	847								
Depth:	1 ft below water	**clear**	**5.57**	**0.84**	**28.55**	**14.80**	**4.80**	**0.4**	**140**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.4 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW44B -081220
Sample Location: MSA-SW44B
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	851								
Depth:	1 ft below water	clear	5.72	1.45	29.08	13.12	4.95	0.7	140
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2.6 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

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Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW44C -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	854								
Depth:	1 ft below water	**clear**	**5.87**	**1.91**	**29.46**	**12.20**	**5.12**	**0.8**	**139**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 4.7 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW44D -081220
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:	8/12/2020	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	858								
Depth:	1 ft below water	**clear**	**5.95**	**2.02**	**29.82**	**10.97**	**5.12**	**1.0**	**139**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth >5.0 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW46A -081220
Sample Location: MSA-SW46A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	#REF!	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	1002								
Depth:	1 ft below water	**clear**	**3.92**	**0.52**	**28.61**	**14.20**	**4.45**	**0.3**	**97**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2.1 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW47A -081220
Sample Location: MSA-SW47A
Sampled By: J. Mullis
C.O.C. No.:

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

SAMPLING DATA:

		Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	ORP
Date:	#REF!	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	946								
Depth:	1 ft below water	**clear**	**5.82**	**1.02**	**28.65**	**15.87**	**3.92**	**0.5**	**104**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2.5 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW48A -081220
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:	#REF!	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	929								
Depth:	1 ft below water	**clear**	**5.97**	**1.32**	**29.15**	**14.03**	**4.55**	**0.7**	**112**
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 1.3 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project No.: 112IC09023

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

Sample ID No.: MSA-SW49A -081220
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:	#REF!	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/L)	(ppt)	mV
Time:	914								
Depth:	1 ft below water	clear	5.85	1.16	28.65	13.97	3.53	0.6	116
Method:	Grab								

SAMPLE COLLECTION INFORMATION:

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

OBSERVATIONS / NOTES:

Water depth 2.6 meters

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX B—DATA-VALIDATION AND FULL LABORATORY REPORTS

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **S. BRENNER** **DATE:** **OCTOBER 28, 2020**

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

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
FROG MORTAR CREEK SURFACE WATER SAMPLING
SDG 240-134931-1

SAMPLES: 33/Aqueous/VOC

MSA-SW37A-081220	MSA-SW37B-081220	MSA-SW37C-081220
MSA-SW37D-081220	MSA-SW38A-081220	MSA-SW38B-081220
MSA-SW38C-081220	MSA-SW38D-081220	MSA-SW40A-081220
MSA-SW40B-081220	MSA-SW40C-081220	MSA-SW40D-081220
MSA-SW41A-081220	MSA-SW41B-081220	MSA-SW41C-081220
MSA-SW41D-081220	MSA-SW42A-081220	MSA-SW42B-081220
MSA-SW42C-081220	MSA-SW42D-081220	MSA-SW43A-081220
MSA-SW43B-081220	MSA-SW43C-081220	MSA-SW43D-081220
MSA-SW44A-081220	MSA-SW44B-081220	MSA-SW44C-081220
MSA-SW44D-081220	MSA-SW46A-081220	MSA-SW47A-081220
MSA-SW48A-081220	MSA-SW49A-081220	TB-081220

Overview

The sample set for LMC-MSA Frog Mortar Creek, SDG 240-134931-1 consisted of thirty-two (32) aqueous environmental samples and one (1) trip blank. All thirty-three (33) aqueous samples were analyzed for Volatile Organic Compounds (VOC). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on August 12, 2020 and analyzed by Eurofins TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Method 8260C analytical and reporting protocols.

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

Major

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

Minor

- The VOC continuing calibration performed on instrument A3UX12 on 08/19/2020 @ 1609 had Percent Differences (%Ds) for t-butyl alcohol which exceeded the 20% quality control limit. Samples associated with analytical batch # 240-447867 were affected. The non-detected results reported for these compounds in the affected samples were qualified as estimated, (UJ).

- The VOC continuing calibration performed on instrument A3UX19 on 08/14/2020 @ 1806 had

%Ds for acetone, dibromomethane, hexachlorobutadiene, and t-butyl alcohol which exceeded the 20% quality control limit. Samples associated with analytical batch # 240-447281 were affected. The non-detected results reported for these compounds in the affected samples were qualified as estimated, (UJ).

- The VOC continuing calibration performed on instrument A3UX19 on 08/17/2020 @ 1746 had %Ds for acetone, 2,2-dichloropropane, hexachlorobutadiene, 1,1,2,2-tetrachloroethane, and t-butyl alcohol which exceeded the 20% quality control limit. Samples associated with analytical batch # 240-447506 were affected. The detected and non-detected results reported for this compound in the affected samples were qualified as estimated, (J) and (UJ), respectively.

- The VOC continuing calibration performed on instrument A3UX19 on 08/87/2020 @ 1927 had %Ds for acetone, dibromomethane, hexachlorobutadiene, 1,1,2,2-tetrachloroethane, and 1,2,4-trichlorobenzene which exceeded the 20% quality control limit. Samples associated with analytical batch # 240-447698 were affected. The detected and non-detected results reported for this compound in the affected samples were qualified as estimated, (J) and (UJ), respectively.

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

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

Notes

Non-detected results were reported to the MDL.

All laboratory control sample recoveries for 2-chloroethyl vinyl ether was above the upper quality control limit. However, no action was taken because the samples were acid preserved and the aforementioned compound is unstable in an acidic medium.

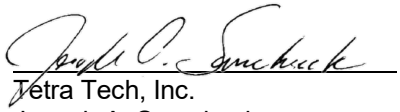
A matrix spike and matrix spike duplicate analysis was not performed by the laboratory.

Executive Summary

Laboratory Performance: A few VOC continuing calibration %Ds exceeded 20%. Non-detected chlorodifluoromethane results were estimated because the compound was evaluated via TIC library search.

Other Factors Affecting Data Quality: 2-Chloroethyl vinyl ether results were rejected because the samples were acid preserved.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (January 2017). The text of this report has been formulated to address only those areas affecting data quality.



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

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

Appendix A

Qualified Analytical Results

PROJ_NO: 09023	NSAMPLE	MSA-SW37A-081220			MSA-SW37A-081220-RE			MSA-SW37B-081220			MSA-SW37B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-1			240-134931-1			240-134931-2			240-134931-2		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U					0.41	U				
1,1,1-TRICHLOROETHANE		0.24	U					0.24	U				
1,1,2,2-TETRACHLOROETHANE		0.56	UJ	C				0.56	UJ	C			
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U					0.41	U				
1,1-DICHLOROETHANE		0.41	U					0.41	U				
1,1-DICHLOROETHENE		0.46	U					0.46	U				
1,1-DICHLOROPROPENE		0.37	U					0.37	U				
1,2,3-TRICHLOROBENZENE		0.54	U					0.54	U				
1,2,3-TRICHLOROPROPANE		0.51	U					0.51	U				
1,2,3-TRIMETHYLBENZENE		0.36	U					0.36	U				
1,2,4-TRICHLOROBENZENE		0.81	U					0.81	U				
1,2,4-TRIMETHYLBENZENE		0.45	U					0.45	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U					0.91	U				
1,2-DIBROMOETHANE		0.37	U					0.37	U				
1,2-DICHLOROBENZENE		0.43	U					0.43	U				
1,2-DICHLOROETHANE		0.43	U					0.43	U				
1,2-DICHLOROPROPANE		0.37	U					0.37	U				
1,3-DICHLOROBENZENE		0.4	U					0.4	U				
1,3-DICHLOROPROPANE		0.21	U					0.21	U				
1,4-DICHLOROBENZENE		0.37	U					0.37	U				
2,2-DICHLOROPROPANE		0.95	UJ	C				0.95	UJ	C			
2-BUTANONE		2.4	U					2.4	U				
2-CHLOROETHYL VINYL ETHER		1.1	UR	M				1.1	UR	M			
2-CHLOROTOLUENE		0.42	U					0.42	U				
2-HEXANONE		2.1	U					2.1	U				
4-CHLOROTOLUENE		0.44	U					0.44	U				
4-ISOPROPYLTOLUENE		0.49	U					0.49	U				
4-METHYL-2-PENTANONE		2.1	U					2.1	U				
ACETONE					17	J	C				6.7	J	C
BENZENE		0.38	U					0.38	U				
BROMOBENZENE		0.38	U					0.38	U				
BROMOCHLOROMETHANE		0.52	U					0.52	U				
BROMODICHLOROMETHANE		0.35	U					0.35	U				
BROMOFORM		0.76	U					0.76	U				
BROMOMETHANE		0.42	U					0.42	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW37C-081220			MSA-SW37C-081220-RE			MSA-SW37D-081220			MSA-SW37D-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-3			240-134931-3			240-134931-4			240-134931-4		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U					0.41	U				
1,1,1-TRICHLOROETHANE		0.24	U					0.24	U				
1,1,2,2-TETRACHLOROETHANE		0.56	UJ	C				0.56	UJ	C			
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U					0.41	U				
1,1-DICHLOROETHANE		0.41	U					0.41	U				
1,1-DICHLOROETHENE		0.46	U					0.46	U				
1,1-DICHLOROPROPENE		0.37	U					0.37	U				
1,2,3-TRICHLOROBENZENE		0.54	U					0.54	U				
1,2,3-TRICHLOROPROPANE		0.51	U					0.51	U				
1,2,3-TRIMETHYLBENZENE		0.36	U					0.36	U				
1,2,4-TRICHLOROBENZENE		0.81	U					0.81	U				
1,2,4-TRIMETHYLBENZENE		0.45	U					0.45	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U					0.91	U				
1,2-DIBROMOETHANE		0.37	U					0.37	U				
1,2-DICHLOROBENZENE		0.43	U					0.43	U				
1,2-DICHLOROETHANE		0.43	U					0.43	U				
1,2-DICHLOROPROPANE		0.37	U					0.37	U				
1,3-DICHLOROBENZENE		0.4	U					0.4	U				
1,3-DICHLOROPROPANE		0.21	U					0.21	U				
1,4-DICHLOROBENZENE		0.37	U					0.37	U				
2,2-DICHLOROPROPANE		0.95	UJ	C				0.95	UJ	C			
2-BUTANONE		2.4	U					2.4	U				
2-CHLOROETHYL VINYL ETHER		1.1	UR	M				1.1	UR	M			
2-CHLOROTOLUENE		0.42	U					0.42	U				
2-HEXANONE		2.1	U					2.1	U				
4-CHLOROTOLUENE		0.44	U					0.44	U				
4-ISOPROPYLTOLUENE		0.49	U					0.49	U				
4-METHYL-2-PENTANONE		2.1	U					2.1	U				
ACETONE					6.6	J	C				6.4	J	C
BENZENE		0.38	U					0.38	U				
BROMOBENZENE		0.38	U					0.38	U				
BROMOCHLOROMETHANE		0.52	U					0.52	U				
BROMODICHLOROMETHANE		0.35	U					0.35	U				
BROMOFORM		0.76	U					0.76	U				
BROMOMETHANE		0.42	U					0.42	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW38A-081220			MSA-SW38A-081220-RE			MSA-SW38B-081220			MSA-SW38B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-5			240-134931-5			240-134931-6			240-134931-6		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U					0.41	U				
1,1,1-TRICHLOROETHANE		0.24	U					0.24	U				
1,1,2,2-TETRACHLOROETHANE		0.56	UJ	C				0.56	UJ	C			
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U					0.41	U				
1,1-DICHLOROETHANE		0.41	U					0.41	U				
1,1-DICHLOROETHENE		0.46	U					0.46	U				
1,1-DICHLOROPROPENE		0.37	U					0.37	U				
1,2,3-TRICHLOROBENZENE		0.54	U					0.54	U				
1,2,3-TRICHLOROPROPANE		0.51	U					0.51	U				
1,2,3-TRIMETHYLBENZENE		0.36	U					0.36	U				
1,2,4-TRICHLOROBENZENE		0.81	U					0.81	U				
1,2,4-TRIMETHYLBENZENE		0.45	U					0.45	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U					0.91	U				
1,2-DIBROMOETHANE		0.37	U					0.37	U				
1,2-DICHLOROBENZENE		0.43	U					0.43	U				
1,2-DICHLOROETHANE		0.43	U					0.43	U				
1,2-DICHLOROPROPANE		0.37	U					0.37	U				
1,3-DICHLOROBENZENE		0.4	U					0.4	U				
1,3-DICHLOROPROPANE		0.21	U					0.21	U				
1,4-DICHLOROBENZENE		0.46	J	P				0.37	U				
2,2-DICHLOROPROPANE		0.95	UJ	C				0.95	UJ	C			
2-BUTANONE		2.4	U					2.4	U				
2-CHLOROETHYL VINYL ETHER		1.1	UR	M				1.1	UR	M			
2-CHLOROTOLUENE		0.42	U					0.42	U				
2-HEXANONE		2.1	U					2.1	U				
4-CHLOROTOLUENE		0.44	U					0.44	U				
4-ISOPROPYLTOLUENE		0.49	U					0.49	U				
4-METHYL-2-PENTANONE		2.1	U					2.1	U				
ACETONE					9.3	J	C				8.4	J	C
BENZENE		0.38	U					0.38	U				
BROMOBENZENE		0.38	U					0.38	U				
BROMOCHLOROMETHANE		0.52	U					0.52	U				
BROMODICHLOROMETHANE		0.35	U					0.35	U				
BROMOFORM		0.76	U					0.76	U				
BROMOMETHANE		0.42	U					0.42	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW38C-081220			MSA-SW38D-081220			MSA-SW38D-081220-RE			MSA-SW40A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-7			240-134931-8			240-134931-8			240-134931-9		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U		0.41	U					0.41	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U					0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.56	UJ	C	0.56	UJ	C				0.56	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U					0.41	U	
1,1-DICHLOROETHANE		0.41	U		0.41	U					0.41	U	
1,1-DICHLOROETHENE		0.46	U		0.46	U					0.46	U	
1,1-DICHLOROPROPENE		0.37	U		0.37	U					0.37	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U					0.54	U	
1,2,3-TRICHLOROPROPANE		0.51	U		0.51	U					0.51	U	
1,2,3-TRIMETHYLBENZENE		0.36	U		0.36	U					0.36	U	
1,2,4-TRICHLOROBENZENE		0.81	U		0.81	U					0.81	U	
1,2,4-TRIMETHYLBENZENE		0.45	U		0.45	U					0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U					0.91	U	
1,2-DIBROMOETHANE		0.37	U		0.37	U					0.37	U	
1,2-DICHLOROBENZENE		0.43	U		0.43	U					0.43	U	
1,2-DICHLOROETHANE		0.43	U		0.43	U					0.43	U	
1,2-DICHLOROPROPANE		0.37	U		0.37	U					0.37	U	
1,3-DICHLOROBENZENE		0.4	U		0.4	U					0.4	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U					0.21	U	
1,4-DICHLOROBENZENE		0.37	U		0.37	U					0.37	U	
2,2-DICHLOROPROPANE		0.95	UJ	C	0.95	UJ	C				0.95	UJ	C
2-BUTANONE		2.4	U		2.4	U					2.4	U	
2-CHLOROETHYL VINYL ETHER		1.1	UR	M	1.1	UR	M				1.1	UR	M
2-CHLOROTOLUENE		0.42	U		0.42	U					0.42	U	
2-HEXANONE		2.1	U		2.1	U					2.1	U	
4-CHLOROTOLUENE		0.44	U		0.44	U					0.44	U	
4-ISOPROPYLTOLUENE		0.49	U		0.49	U					0.49	U	
4-METHYL-2-PENTANONE		2.1	U		2.1	U					2.1	U	
ACETONE		5.4	UJ	C				6.7	J	C			
BENZENE		0.38	U		0.38	U					0.38	U	
BROMOBENZENE		0.38	U		0.38	U					0.38	U	
BROMOCHLOROMETHANE		0.52	U		0.52	U					0.52	U	
BROMODICHLOROMETHANE		0.35	U		0.35	U					0.35	U	
BROMOFORM		0.76	U		0.76	U					0.76	U	
BROMOMETHANE		0.42	U		0.42	U					0.42	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW40A-081220-RE			MSA-SW40B-081220			MSA-SW40B-081220-RE			MSA-SW40C-081220		
SDG: 240-134931-1	LAB_ID	240-134931-9			240-134931-10			240-134931-10			240-134931-11		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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					0.41	U					0.41	U	
1,1,1-TRICHLOROETHANE					0.24	U					0.24	U	
1,1,2,2-TETRACHLOROETHANE					0.56	UJ	C				0.56	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE					0.41	U					0.41	U	
1,1-DICHLOROETHANE					0.41	U					0.41	U	
1,1-DICHLOROETHENE					0.46	U					0.46	U	
1,1-DICHLOROPROPENE					0.37	U					0.37	U	
1,2,3-TRICHLOROBENZENE					0.54	U					0.54	U	
1,2,3-TRICHLOROPROPANE					0.51	U					0.51	U	
1,2,3-TRIMETHYLBENZENE					0.36	U					0.36	U	
1,2,4-TRICHLOROBENZENE					0.81	U					0.81	UJ	C
1,2,4-TRIMETHYLBENZENE					0.45	U					0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE					0.91	U					0.91	U	
1,2-DIBROMOETHANE					0.37	U					0.37	U	
1,2-DICHLOROBENZENE					0.43	U					0.43	U	
1,2-DICHLOROETHANE					0.43	U					0.43	U	
1,2-DICHLOROPROPANE					0.37	U					0.37	U	
1,3-DICHLOROBENZENE					0.4	U					0.4	U	
1,3-DICHLOROPROPANE					0.21	U					0.21	U	
1,4-DICHLOROBENZENE					0.37	U					0.37	U	
2,2-DICHLOROPROPANE					0.95	UJ	C				0.95	U	
2-BUTANONE					2.4	U					2.4	U	
2-CHLOROETHYL VINYL ETHER					1.1	UR	M				1.1	UR	M
2-CHLOROTOLUENE					0.42	U					0.42	U	
2-HEXANONE					2.1	U					2.1	U	
4-CHLOROTOLUENE					0.44	U					0.44	U	
4-ISOPROPYLTOLUENE					0.49	U					0.49	U	
4-METHYL-2-PENTANONE					2.1	U					2.1	U	
ACETONE		10	J	C				7.2	J	C	8	J	C
BENZENE					0.38	U					0.38	U	
BROMOBENZENE					0.38	U					0.38	U	
BROMOCHLOROMETHANE					0.52	U					0.52	U	
BROMODICHLOROMETHANE					0.35	U					0.35	U	
BROMOFORM					0.76	U					0.76	U	
BROMOMETHANE					0.42	U					0.42	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW40D-081220			MSA-SW41A-081220			MSA-SW41B-081220			MSA-SW41C-081220		
SDG: 240-134931-1	LAB_ID	240-134931-12			240-134931-13			240-134931-14			240-134931-15		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U		0.41	U		0.41	U		0.41	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.56	UJ	C	0.56	UJ	C	0.56	UJ	C	0.56	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHENE		0.46	U		0.46	U		0.46	U		0.46	U	
1,1-DICHLOROPROPENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.51	U		0.51	U		0.51	U		0.51	U	
1,2,3-TRIMETHYLBENZENE		0.36	U		0.36	U		0.36	U		0.36	U	
1,2,4-TRICHLOROBENZENE		0.81	UJ	C	0.81	UJ	C	0.81	UJ	C	0.81	UJ	C
1,2,4-TRIMETHYLBENZENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2-DICHLOROBENZENE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2-DICHLOROETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2-DICHLOROPROPANE		0.37	U		0.37	U		0.37	U		0.37	U	
1,3-DICHLOROBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
2,2-DICHLOROPROPANE		0.95	U		0.95	U		0.95	U		0.95	U	
2-BUTANONE		2.4	U		2.4	U		2.4	U		2.4	U	
2-CHLOROETHYL VINYL ETHER		1.1	UR	M	1.1	UR	M	1.1	UR	M	1.1	UR	M
2-CHLOROTOLUENE		0.42	U		0.42	U		0.42	U		0.42	U	
2-HEXANONE		2.1	U		2.1	U		2.1	U		2.1	U	
4-CHLOROTOLUENE		0.44	U		0.44	U		0.44	U		0.44	U	
4-ISOPROPYLTOLUENE		0.49	U		0.49	U		0.49	U		0.49	U	
4-METHYL-2-PENTANONE		2.1	U		2.1	U		2.1	U		2.1	U	
ACETONE		5.7	J	C	9.2	J	C	8.7	J	C	7.1	J	C
BENZENE		0.38	U		0.38	U		0.38	U		0.38	U	
BROMOBENZENE		0.38	U		0.38	U		0.38	U		0.38	U	
BROMOCHLOROMETHANE		0.52	U		0.52	U		0.52	U		0.52	U	
BROMODICHLOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	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: 09023	NSAMPLE	MSA-SW41D-081220			MSA-SW42A-081220			MSA-SW42B-081220			MSA-SW42B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-16			240-134931-17			240-134931-18			240-134931-18		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U		0.41	U		0.41	U				
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U				
1,1,2,2-TETRACHLOROETHANE		0.56	U		0.56	U		0.56	UJ	C			
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U				
1,1-DICHLOROETHANE		0.41	U		0.41	U		0.41	U				
1,1-DICHLOROETHENE		0.46	U		0.46	U		0.46	U				
1,1-DICHLOROPROPENE		0.37	U		0.37	U		0.37	U				
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U				
1,2,3-TRICHLOROPROPANE		0.51	U		0.51	U		0.51	U				
1,2,3-TRIMETHYLBENZENE		0.36	U		0.36	U		0.36	U				
1,2,4-TRICHLOROBENZENE		0.81	U		0.81	U		0.81	U				
1,2,4-TRIMETHYLBENZENE		0.45	U		0.45	U		0.45	U				
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U				
1,2-DIBROMOETHANE		0.37	U		0.37	U		0.37	U				
1,2-DICHLOROBENZENE		0.43	U		0.43	U		0.43	U				
1,2-DICHLOROETHANE		0.43	U		0.43	U		0.43	U				
1,2-DICHLOROPROPANE		0.37	U		0.37	U		0.37	U				
1,3-DICHLOROBENZENE		0.4	U		0.4	U		0.4	U				
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U				
1,4-DICHLOROBENZENE		0.37	U		0.37	U		0.37	U				
2,2-DICHLOROPROPANE		0.95	U		0.95	U		0.95	UJ	C			
2-BUTANONE		2.4	U		2.4	U		2.4	U				
2-CHLOROETHYL VINYL ETHER		1.1	UR	M	1.1	UR	M	1.1	UR	M			
2-CHLOROTOLUENE		0.42	U		0.42	U		0.42	U				
2-HEXANONE		2.1	U		2.1	U		2.1	U				
4-CHLOROTOLUENE		0.44	U		0.44	U		0.44	U				
4-ISOPROPYLTOLUENE		0.49	U		0.49	U		0.49	U				
4-METHYL-2-PENTANONE		2.1	U		2.1	U		2.1	U				
ACETONE		5.4	U		11						8.1	J	C
BENZENE		0.38	U		0.38	U		0.38	U				
BROMOBENZENE		0.38	U		0.38	U		0.38	U				
BROMOCHLOROMETHANE		0.52	U		0.52	U		0.52	U				
BROMODICHLOROMETHANE		0.35	U		0.35	U		0.35	U				
BROMOFORM		0.76	U		0.76	U		0.76	U				
BROMOMETHANE		0.42	U		0.42	U		0.42	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW42C-081220			MSA-SW42C-081220-RE			MSA-SW42D-081220			MSA-SW43A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-19			240-134931-19			240-134931-20			240-134931-21		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U					0.41	U		0.41	U	
1,1,1-TRICHLOROETHANE		0.24	U					0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.56	UJ	C				0.56	U		0.56	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U					0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.41	U					0.41	U		0.41	U	
1,1-DICHLOROETHENE		0.46	U					0.46	U		0.46	U	
1,1-DICHLOROPROPENE		0.37	U					0.37	U		0.37	U	
1,2,3-TRICHLOROBENZENE		0.54	U					0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.51	U					0.51	U		0.51	U	
1,2,3-TRIMETHYLBENZENE		0.36	U					0.36	U		0.36	U	
1,2,4-TRICHLOROBENZENE		0.81	U					0.81	U		0.81	U	
1,2,4-TRIMETHYLBENZENE		0.45	U					0.45	U		0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U					0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.37	U					0.37	U		0.37	U	
1,2-DICHLOROBENZENE		0.43	U					0.43	U		0.43	U	
1,2-DICHLOROETHANE		0.43	U					0.43	U		0.43	U	
1,2-DICHLOROPROPANE		0.37	U					0.37	U		0.37	U	
1,3-DICHLOROBENZENE		0.4	U					0.4	U		0.4	U	
1,3-DICHLOROPROPANE		0.21	U					0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.37	U					0.37	U		0.37	U	
2,2-DICHLOROPROPANE		0.95	UJ	C				0.95	U		0.95	U	
2-BUTANONE		2.4	U					2.4	U		2.4	U	
2-CHLOROETHYL VINYL ETHER		1.1	UR	M				1.1	UR	M	1.1	UR	M
2-CHLOROTOLUENE		0.42	U					0.42	U		0.42	U	
2-HEXANONE		2.1	U					2.1	U		2.1	U	
4-CHLOROTOLUENE		0.44	U					0.44	U		0.44	U	
4-ISOPROPYLTOLUENE		0.49	U					0.49	U		0.49	U	
4-METHYL-2-PENTANONE		2.1	U					2.1	U		2.1	U	
ACETONE					7.6	J	C	5.4	UJ	C	10	J	C
BENZENE		0.38	U					0.38	U		0.38	U	
BROMOBENZENE		0.38	U					0.38	U		0.38	U	
BROMOCHLOROMETHANE		0.52	U					0.52	U		0.52	U	
BROMODICHLOROMETHANE		0.35	U					0.35	U		0.35	U	
BROMOFORM		0.76	U					0.76	U		0.76	U	
BROMOMETHANE		0.42	U					0.42	U		0.42	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW43B-081220			MSA-SW43C-081220			MSA-SW43D-081220			MSA-SW44A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-22			240-134931-23			240-134931-24			240-134931-25		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U		0.41	U		0.41	U		0.41	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.56	U		0.56	U		0.56	U		0.56	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHENE		0.46	U		0.46	U		0.46	U		0.46	U	
1,1-DICHLOROPROPENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.51	U		0.51	U		0.51	U		0.51	U	
1,2,3-TRIMETHYLBENZENE		0.36	U		0.36	U		0.36	U		0.36	U	
1,2,4-TRICHLOROBENZENE		0.81	U		0.81	U		0.81	U		0.81	U	
1,2,4-TRIMETHYLBENZENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2-DICHLOROBENZENE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2-DICHLOROETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2-DICHLOROPROPANE		0.37	U		0.37	U		0.37	U		0.37	U	
1,3-DICHLOROBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
2,2-DICHLOROPROPANE		0.95	U		0.95	U		0.95	U		0.95	U	
2-BUTANONE		2.4	U		2.4	U		2.4	U		2.4	U	
2-CHLOROETHYL VINYL ETHER		1.1	UR	M	1.1	UR	M	1.1	UR	M	1.1	UR	M
2-CHLOROTOLUENE		0.42	U		0.42	U		0.42	U		0.42	U	
2-HEXANONE		2.1	U		2.1	U		2.1	U		2.1	U	
4-CHLOROTOLUENE		0.44	U		0.44	U		0.44	U		0.44	U	
4-ISOPROPYLTOLUENE		0.49	U		0.49	U		0.49	U		0.49	U	
4-METHYL-2-PENTANONE		2.1	U		2.1	U		2.1	U		2.1	U	
ACETONE		9.1	J	C	7.1	J	C	6.7	J	C	10	J	C
BENZENE		0.38	U		0.38	U		0.38	U		0.38	U	
BROMOBENZENE		0.38	U		0.38	U		0.38	U		0.38	U	
BROMOCHLOROMETHANE		0.52	U		0.52	U		0.52	U		0.52	U	
BROMODICHLOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	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: 09023	NSAMPLE	MSA-SW44B-081220			MSA-SW44C-081220			MSA-SW44D-081220			MSA-SW46A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-26			240-134931-27			240-134931-28			240-134931-30		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.41	U		0.41	U		0.41	U		0.41	U	
1,1,1-TRICHLOROETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,1,2,2-TETRACHLOROETHANE		0.56	U		0.56	U		0.56	U		0.56	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHANE		0.41	U		0.41	U		0.41	U		0.41	U	
1,1-DICHLOROETHENE		0.46	U		0.46	U		0.46	U		0.46	U	
1,1-DICHLOROPROPENE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2,3-TRICHLOROBENZENE		0.54	U		0.54	U		0.54	U		0.54	U	
1,2,3-TRICHLOROPROPANE		0.51	U		0.51	U		0.51	U		0.51	U	
1,2,3-TRIMETHYLBENZENE		0.36	U		0.36	U		0.36	U		0.36	U	
1,2,4-TRICHLOROBENZENE		0.81	U		0.81	U		0.81	U		0.81	U	
1,2,4-TRIMETHYLBENZENE		0.45	U		0.45	U		0.45	U		0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.91	U		0.91	U		0.91	U		0.91	U	
1,2-DIBROMOETHANE		0.37	U		0.37	U		0.37	U		0.37	U	
1,2-DICHLOROBENZENE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2-DICHLOROETHANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2-DICHLOROPROPANE		0.37	U		0.37	U		0.37	U		0.37	U	
1,3-DICHLOROBENZENE		0.4	U		0.4	U		0.4	U		0.4	U	
1,3-DICHLOROPROPANE		0.21	U		0.21	U		0.21	U		0.21	U	
1,4-DICHLOROBENZENE		0.37	U		0.37	U		0.37	U		0.37	U	
2,2-DICHLOROPROPANE		0.95	U		0.95	U		0.95	U		0.95	UJ	C
2-BUTANONE		2.4	U		2.4	U		2.4	U		2.4	U	
2-CHLOROETHYL VINYL ETHER		1.1	UR	M	1.1	UR	M	1.1	UR	M	1.1	UR	M
2-CHLOROTOLUENE		0.42	U		0.42	U		0.42	U		0.42	U	
2-HEXANONE		2.1	U		2.1	U		2.1	U		2.1	U	
4-CHLOROTOLUENE		0.44	U		0.44	U		0.44	U		0.44	U	
4-ISOPROPYLTOLUENE		0.49	U		0.49	U		0.49	U		0.49	U	
4-METHYL-2-PENTANONE		2.1	U		2.1	U		2.1	U		2.1	U	
ACETONE		6.6	J	C	6.3	J	C	5.4	UJ	C			
BENZENE		0.38	U		0.38	U		0.38	U		0.38	U	
BROMOBENZENE		0.38	U		0.38	U		0.38	U		0.38	U	
BROMOCHLOROMETHANE		0.52	U		0.52	U		0.52	U		0.52	U	
BROMODICHLOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	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: 09023	NSAMPLE	MSA-SW46A-081220-RE			MSA-SW47A-081220			MSA-SW47A-081220-RE			MSA-SW48A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-30			240-134931-31			240-134931-31			240-134931-32		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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					0.41	U					0.41	U	
1,1,1-TRICHLOROETHANE					0.24	U					0.24	U	
1,1,2,2-TETRACHLOROETHANE					0.56	UJ	C				0.56	UJ	C
1,1,2-TRICHLOROTRIFLUOROETHANE					0.41	U					0.41	U	
1,1-DICHLOROETHANE					0.41	U					0.41	U	
1,1-DICHLOROETHENE					0.46	U					0.46	U	
1,1-DICHLOROPROPENE					0.37	U					0.37	U	
1,2,3-TRICHLOROBENZENE					0.54	U					0.54	U	
1,2,3-TRICHLOROPROPANE					0.51	U					0.51	U	
1,2,3-TRIMETHYLBENZENE					0.36	U					0.36	U	
1,2,4-TRICHLOROBENZENE					0.81	U					0.81	U	
1,2,4-TRIMETHYLBENZENE					0.45	U					0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE					0.91	U					0.91	U	
1,2-DIBROMOETHANE					0.37	U					0.37	U	
1,2-DICHLOROBENZENE					0.43	U					0.43	U	
1,2-DICHLOROETHANE					0.43	U					0.43	U	
1,2-DICHLOROPROPANE					0.37	U					0.37	U	
1,3-DICHLOROBENZENE					0.4	U					0.4	U	
1,3-DICHLOROPROPANE					0.21	U					0.21	U	
1,4-DICHLOROBENZENE					0.37	U					0.37	U	
2,2-DICHLOROPROPANE					0.95	UJ	C				0.95	UJ	C
2-BUTANONE					2.4	U					2.4	U	
2-CHLOROETHYL VINYL ETHER					1.1	UR	M				1.1	UR	M
2-CHLOROTOLUENE					0.42	U					0.42	U	
2-HEXANONE					2.1	U					2.1	U	
4-CHLOROTOLUENE					0.44	U					0.44	U	
4-ISOPROPYLTOLUENE					0.49	U					0.49	U	
4-METHYL-2-PENTANONE					2.1	U					2.1	U	
ACETONE		12	J	C				10	J	C			
BENZENE					0.38	U					0.38	U	
BROMOBENZENE					0.38	U					0.38	U	
BROMOCHLOROMETHANE					0.52	U					0.52	U	
BROMODICHLOROMETHANE					0.35	U					0.35	U	
BROMOFORM					0.76	U					0.76	U	
BROMOMETHANE					0.42	U					0.42	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW48A-081220-RE			MSA-SW49A-081220			MSA-SW49A-081220-RE			TB-081220		
SDG: 240-134931-1	LAB_ID	240-134931-32			240-134931-33			240-134931-33			240-134931-29		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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					0.41	U					0.41	U	
1,1,1-TRICHLOROETHANE					0.24	U					0.24	U	
1,1,2,2-TETRACHLOROETHANE					0.56	UJ	C				0.56	U	
1,1,2-TRICHLOROTRIFLUOROETHANE					0.41	U					0.41	U	
1,1-DICHLOROETHANE					0.41	U					0.41	U	
1,1-DICHLOROETHENE					0.46	U					0.46	U	
1,1-DICHLOROPROPENE					0.37	U					0.37	U	
1,2,3-TRICHLOROBENZENE					0.54	U					0.54	U	
1,2,3-TRICHLOROPROPANE					0.51	U					0.51	U	
1,2,3-TRIMETHYLBENZENE					0.36	U					0.36	U	
1,2,4-TRICHLOROBENZENE					0.81	U					0.81	U	
1,2,4-TRIMETHYLBENZENE					0.45	U					0.45	U	
1,2-DIBROMO-3-CHLOROPROPANE					0.91	U					0.91	U	
1,2-DIBROMOETHANE					0.37	U					0.37	U	
1,2-DICHLOROBENZENE					0.43	U					0.43	U	
1,2-DICHLOROETHANE					0.43	U					0.43	U	
1,2-DICHLOROPROPANE					0.37	U					0.37	U	
1,3-DICHLOROBENZENE					0.4	U					0.4	U	
1,3-DICHLOROPROPANE					0.21	U					0.21	U	
1,4-DICHLOROBENZENE					0.37	U					0.37	U	
2,2-DICHLOROPROPANE					0.95	UJ	C				0.95	U	
2-BUTANONE					2.4	U					2.4	U	
2-CHLOROETHYL VINYL ETHER					1.1	UR	M				1.1	UR	M
2-CHLOROTOLUENE					0.42	U					0.42	U	
2-HEXANONE					2.1	U					2.1	U	
4-CHLOROTOLUENE					0.44	U					0.44	U	
4-ISOPROPYLTOLUENE					0.49	U					0.49	U	
4-METHYL-2-PENTANONE					2.1	U					2.1	U	
ACETONE		11	J	C				12	J	C	5.4	UJ	C
BENZENE					0.38	U					0.38	U	
BROMOBENZENE					0.38	U					0.38	U	
BROMOCHLOROMETHANE					0.52	U					0.52	U	
BROMODICHLOROMETHANE					0.35	U					0.35	U	
BROMOFORM					0.76	U					0.76	U	
BROMOMETHANE					0.42	U					0.42	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW37A-081220			MSA-SW37A-081220-RE			MSA-SW37B-081220			MSA-SW37B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-1			240-134931-1			240-134931-2			240-134931-2		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
CARBON TETRACHLORIDE		0.26	U					0.26	U				
CHLOROBENZENE		0.32	U					0.32	U				
CHLORODIBROMOMETHANE		0.39	U					0.39	U				
CHLORODIFLUOROMETHANE		1	UJ	Q				1	UJ	Q			
CHLOROETHANE		0.83	U					0.83	U				
CHLOROFORM		0.4	U					0.4	U				
CHLOROMETHANE		0.64	U					0.64	U				
CIS-1,2-DICHLOROETHENE		0.38	U					0.38	U				
CIS-1,3-DICHLOROPROPENE		0.61	U					0.61	U				
DIBROMOMETHANE		0.33	U					0.33	U				
DICHLORODIFLUOROMETHANE		0.35	U					0.35	U				
DIISOPROPYL ETHER		0.36	U					0.36	U				
ETHYL TERT-BUTYL ETHER		0.43	U					0.43	U				
ETHYLBENZENE		0.39	U					0.39	U				
HEXACHLOROBUTADIENE		0.83	UJ	C				0.83	UJ	C			
ISOPROPYLBENZENE		0.45	U					0.45	U				
M+P-XYLENES		0.4	U					0.4	U				
METHYL TERT-BUTYL ETHER		0.44	U					0.44	U				
METHYLENE CHLORIDE		1.3	U					1.3	U				
NAPHTHALENE		0.82	U					0.82	U				
N-BUTYLBENZENE		0.59	U					0.59	U				
N-PROPYLBENZENE		0.46	U					0.46	U				
O-XYLENE		0.43	U					0.43	U				
SEC-BUTYLBENZENE		0.63	U					0.63	U				
STYRENE		0.4	U					0.4	U				
TERT-AMYL METHYL ETHER		0.39	U					0.39	U				
TERT-BUTYLBENZENE		0.51	U					0.51	U				
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C				1.7	UJ	C			
TETRACHLOROETHENE		0.33	U					0.33	U				
TOLUENE		0.35	U					0.35	U				
TOTAL XYLENES		0.42	U					0.42	U				
TRANS-1,2-DICHLOROETHENE		0.43	U					0.43	U				
TRANS-1,3-DICHLOROPROPENE		0.67	U					0.67	U				
TRICHLOROETHENE		0.36	U					0.36	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW37C-081220			MSA-SW37C-081220-RE			MSA-SW37D-081220			MSA-SW37D-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-3			240-134931-3			240-134931-4			240-134931-4		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
CARBON TETRACHLORIDE		0.26	U					0.26	U				
CHLOROBENZENE		0.32	U					0.32	U				
CHLORODIBROMOMETHANE		0.39	U					0.39	U				
CHLORODIFLUOROMETHANE		1	UJ	Q				1	UJ	Q			
CHLOROETHANE		0.83	U					0.83	U				
CHLOROFORM		0.4	U					0.4	U				
CHLOROMETHANE		0.64	U					0.64	U				
CIS-1,2-DICHLOROETHENE		0.38	U					0.38	U				
CIS-1,3-DICHLOROPROPENE		0.61	U					0.61	U				
DIBROMOMETHANE		0.33	U					0.33	U				
DICHLORODIFLUOROMETHANE		0.35	U					0.35	U				
DIISOPROPYL ETHER		0.36	U					0.36	U				
ETHYL TERT-BUTYL ETHER		0.43	U					0.43	U				
ETHYLBENZENE		0.39	U					0.39	U				
HEXACHLOROBUTADIENE		0.83	UJ	C				0.83	UJ	C			
ISOPROPYLBENZENE		0.45	U					0.45	U				
M+P-XYLENES		0.4	U					0.4	U				
METHYL TERT-BUTYL ETHER		0.44	U					0.44	U				
METHYLENE CHLORIDE		1.3	U					1.3	U				
NAPHTHALENE		0.82	U					0.82	U				
N-BUTYLBENZENE		0.59	U					0.59	U				
N-PROPYLBENZENE		0.46	U					0.46	U				
O-XYLENE		0.43	U					0.43	U				
SEC-BUTYLBENZENE		0.63	U					0.63	U				
STYRENE		0.4	U					0.4	U				
TERT-AMYL METHYL ETHER		0.39	U					0.39	U				
TERT-BUTYLBENZENE		0.51	U					0.51	U				
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C				1.7	UJ	C			
TETRACHLOROETHENE		0.33	U					0.33	U				
TOLUENE		0.35	U					0.35	U				
TOTAL XYLENES		0.42	U					0.42	U				
TRANS-1,2-DICHLOROETHENE		0.43	U					0.43	U				
TRANS-1,3-DICHLOROPROPENE		0.67	U					0.67	U				
TRICHLOROETHENE		0.36	U					0.36	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW38A-081220			MSA-SW38A-081220-RE			MSA-SW38B-081220			MSA-SW38B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-5			240-134931-5			240-134931-6			240-134931-6		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
CARBON TETRACHLORIDE		0.26	U					0.26	U				
CHLOROBENZENE		0.32	U					0.32	U				
CHLORODIBROMOMETHANE		0.39	U					0.39	U				
CHLORODIFLUOROMETHANE		1	UJ	Q				1	UJ	Q			
CHLOROETHANE		0.83	U					0.83	U				
CHLOROFORM		0.4	U					0.4	U				
CHLOROMETHANE		0.64	U					0.64	U				
CIS-1,2-DICHLOROETHENE		0.62	J	P				0.38	U				
CIS-1,3-DICHLOROPROPENE		0.61	U					0.61	U				
DIBROMOMETHANE		0.33	U					0.33	U				
DICHLORODIFLUOROMETHANE		0.35	U					0.35	U				
DIISOPROPYL ETHER		0.36	U					0.36	U				
ETHYL TERT-BUTYL ETHER		0.43	U					0.43	U				
ETHYLBENZENE		0.39	U					0.39	U				
HEXACHLOROBUTADIENE		0.83	UJ	C				0.83	UJ	C			
ISOPROPYLBENZENE		0.45	U					0.45	U				
M+P-XYLENES		0.4	U					0.4	U				
METHYL TERT-BUTYL ETHER		0.44	U					0.44	U				
METHYLENE CHLORIDE		1.3	U					1.3	U				
NAPHTHALENE		0.82	U					0.82	U				
N-BUTYLBENZENE		0.59	U					0.59	U				
N-PROPYLBENZENE		0.46	U					0.46	U				
O-XYLENE		0.43	U					0.43	U				
SEC-BUTYLBENZENE		0.63	U					0.63	U				
STYRENE		0.4	U					0.4	U				
TERT-AMYL METHYL ETHER		0.39	U					0.39	U				
TERT-BUTYLBENZENE		0.51	U					0.51	U				
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C				1.7	UJ	C			
TETRACHLOROETHENE		0.33	U					0.33	U				
TOLUENE		0.35	U					0.35	U				
TOTAL XYLENES		0.42	U					0.42	U				
TRANS-1,2-DICHLOROETHENE		0.43	U					0.43	U				
TRANS-1,3-DICHLOROPROPENE		0.67	U					0.67	U				
TRICHLOROETHENE		0.36	U					0.36	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW38C-081220			MSA-SW38D-081220			MSA-SW38D-081220-RE			MSA-SW40A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-7			240-134931-8			240-134931-8			240-134931-9		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
CARBON TETRACHLORIDE		0.26	U		0.26	U					0.26	U	
CHLOROBENZENE		0.32	U		0.32	U					0.32	U	
CHLORODIBROMOMETHANE		0.39	U		0.39	U					0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q				1	UJ	Q
CHLOROETHANE		0.83	U		0.83	U					0.83	U	
CHLOROFORM		0.4	U		0.4	U					0.4	U	
CHLOROMETHANE		0.64	U		0.64	U					0.64	U	
CIS-1,2-DICHLOROETHENE		0.38	U		0.38	U					0.38	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U					0.61	U	
DIBROMOMETHANE		0.33	U		0.33	U					0.33	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U					0.35	U	
DIISOPROPYL ETHER		0.36	U		0.36	U					0.36	U	
ETHYL TERT-BUTYL ETHER		0.43	U		0.43	U					0.43	U	
ETHYLBENZENE		0.39	U		0.39	U					0.39	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C				0.83	UJ	C
ISOPROPYLBENZENE		0.45	U		0.45	U					0.45	U	
M+P-XYLENES		0.4	U		0.4	U					0.4	U	
METHYL TERT-BUTYL ETHER		0.44	U		0.44	U					0.44	U	
METHYLENE CHLORIDE		1.3	U		1.3	U					1.3	U	
NAPHTHALENE		0.82	U		0.82	U					0.82	U	
N-BUTYLBENZENE		0.59	U		0.59	U					0.59	U	
N-PROPYLBENZENE		0.46	U		0.46	U					0.46	U	
O-XYLENE		0.43	U		0.43	U					0.43	U	
SEC-BUTYLBENZENE		0.63	U		0.63	U					0.63	U	
STYRENE		0.4	U		0.4	U					0.4	U	
TERT-AMYL METHYL ETHER		0.39	U		0.39	U					0.39	U	
TERT-BUTYLBENZENE		0.51	U		0.51	U					0.51	U	
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C	1.7	UJ	C				1.7	UJ	C
TETRACHLOROETHENE		0.33	U		0.33	U					0.33	U	
TOLUENE		0.35	U		0.35	U					0.35	U	
TOTAL XYLENES		0.42	U		0.42	U					0.42	U	
TRANS-1,2-DICHLOROETHENE		0.43	U		0.43	U					0.43	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U					0.67	U	
TRICHLOROETHENE		0.36	U		0.36	U					0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW40A-081220-RE			MSA-SW40B-081220			MSA-SW40B-081220-RE			MSA-SW40C-081220		
SDG: 240-134931-1	LAB_ID	240-134931-9			240-134931-10			240-134931-10			240-134931-11		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
CARBON TETRACHLORIDE					0.26	U					0.26	U	
CHLOROBENZENE					0.32	U					0.32	U	
CHLORODIBROMOMETHANE					0.39	U					0.39	U	
CHLORODIFLUOROMETHANE					1	UJ	Q				1	UJ	Q
CHLOROETHANE					0.83	U					0.83	U	
CHLOROFORM					0.4	U					0.4	U	
CHLOROMETHANE					0.64	U					0.64	U	
CIS-1,2-DICHLOROETHENE					0.38	U					0.38	U	
CIS-1,3-DICHLOROPROPENE					0.61	U					0.61	U	
DIBROMOMETHANE					0.33	U					0.33	UJ	C
DICHLORODIFLUOROMETHANE					0.35	U					0.35	U	
DIISOPROPYL ETHER					0.36	U					0.36	U	
ETHYL TERT-BUTYL ETHER					0.43	U					0.43	U	
ETHYLBENZENE					0.39	U					0.39	U	
HEXACHLOROBUTADIENE					0.83	UJ	C				0.83	UJ	C
ISOPROPYLBENZENE					0.45	U					0.45	U	
M+P-XYLENES					0.4	U					0.4	U	
METHYL TERT-BUTYL ETHER					0.44	U					0.44	U	
METHYLENE CHLORIDE					1.3	U					1.3	U	
NAPHTHALENE					0.82	U					0.82	U	
N-BUTYLBENZENE					0.59	U					0.59	U	
N-PROPYLBENZENE					0.46	U					0.46	U	
O-XYLENE					0.43	U					0.43	U	
SEC-BUTYLBENZENE					0.63	U					0.63	U	
STYRENE					0.4	U					0.4	U	
TERT-AMYL METHYL ETHER					0.39	U					0.39	U	
TERT-BUTYLBENZENE					0.51	U					0.51	U	
TERTIARY-BUTYL ALCOHOL					1.7	UJ	C				1.7	U	
TETRACHLOROETHENE					0.33	U					0.33	U	
TOLUENE					0.35	U					0.35	U	
TOTAL XYLENES					0.42	U					0.42	U	
TRANS-1,2-DICHLOROETHENE					0.43	U					0.43	U	
TRANS-1,3-DICHLOROPROPENE					0.67	U					0.67	U	
TRICHLOROETHENE					0.36	U					0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW40D-081220			MSA-SW41A-081220			MSA-SW41B-081220			MSA-SW41C-081220		
SDG: 240-134931-1	LAB_ID	240-134931-12			240-134931-13			240-134931-14			240-134931-15		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.32	U		0.32	U		0.32	U		0.32	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		0.4	U		0.4	U		0.4	U		0.4	U	
CHLOROMETHANE		0.64	U		0.64	U		0.64	U		0.64	U	
CIS-1,2-DICHLOROETHENE		0.38	U		0.38	U		0.38	U		0.38	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.33	UJ	C	0.33	UJ	C	0.33	UJ	C	0.33	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.36	U		0.36	U		0.36	U		0.36	U	
ETHYL TERT-BUTYL ETHER		0.43	U		0.43	U		0.43	U		0.43	U	
ETHYLBENZENE		0.39	U		0.39	U		0.39	U		0.39	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.45	U		0.45	U		0.45	U		0.45	U	
M+P-XYLENES		0.4	U		0.4	U		0.4	U		0.4	U	
METHYL TERT-BUTYL ETHER		0.44	U		0.44	U		0.44	U		0.44	U	
METHYLENE CHLORIDE		1.3	U		1.3	U		1.3	U		1.3	U	
NAPHTHALENE		0.82	U		0.82	U		0.82	U		0.82	U	
N-BUTYLBENZENE		0.59	U		0.59	U		0.59	U		0.59	U	
N-PROPYLBENZENE		0.46	U		0.46	U		0.46	U		0.46	U	
O-XYLENE		0.43	U		0.43	U		0.43	U		0.43	U	
SEC-BUTYLBENZENE		0.63	U		0.63	U		0.63	U		0.63	U	
STYRENE		0.4	U		0.4	U		0.4	U		0.4	U	
TERT-AMYL METHYL ETHER		0.39	U		0.39	U		0.39	U		0.39	U	
TERT-BUTYLBENZENE		0.51	U		0.51	U		0.51	U		0.51	U	
TERTIARY-BUTYL ALCOHOL		1.7	U		1.7	U		1.7	U		1.7	U	
TETRACHLOROETHENE		0.33	U		0.33	U		0.33	U		0.33	U	
TOLUENE		0.35	U		0.35	U		0.35	U		0.35	U	
TOTAL XYLENES		0.42	U		0.42	U		0.42	U		0.42	U	
TRANS-1,2-DICHLOROETHENE		0.43	U		0.43	U		0.43	U		0.43	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.36	U		0.36	U		0.36	U		0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW41D-081220			MSA-SW42A-081220			MSA-SW42B-081220			MSA-SW42B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-16			240-134931-17			240-134931-18			240-134931-18		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
CARBON TETRACHLORIDE		0.26	U		0.26	U		0.26	U				
CHLOROBENZENE		0.32	U		0.32	U		0.32	U				
CHLORODIBROMOMETHANE		0.39	U		0.39	U		0.39	U				
CHLORODIFLUOROMETHANE		1	UJ	Q	1	UJ	Q	1	UJ	Q			
CHLOROETHANE		0.83	U		0.83	U		0.83	U				
CHLOROFORM		0.4	U		0.4	U		0.4	U				
CHLOROMETHANE		0.64	U		0.64	U		0.64	U				
CIS-1,2-DICHLOROETHENE		0.38	U		0.38	U		0.38	U				
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U				
DIBROMOMETHANE		0.33	U		0.33	U		0.33	U				
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U				
DIISOPROPYL ETHER		0.36	U		0.36	U		0.36	U				
ETHYL TERT-BUTYL ETHER		0.43	U		0.43	U		0.43	U				
ETHYLBENZENE		0.39	U		0.39	U		0.39	U				
HEXACHLOROBUTADIENE		0.83	U		0.83	U		0.83	UJ	C			
ISOPROPYLBENZENE		0.45	U		0.45	U		0.45	U				
M+P-XYLENES		0.4	U		0.4	U		0.4	U				
METHYL TERT-BUTYL ETHER		0.44	U		0.44	U		0.44	U				
METHYLENE CHLORIDE		1.3	U		1.3	U		1.3	U				
NAPHTHALENE		0.82	U		0.82	U		0.82	U				
N-BUTYLBENZENE		0.59	U		0.59	U		0.59	U				
N-PROPYLBENZENE		0.46	U		0.46	U		0.46	U				
O-XYLENE		0.43	U		0.43	U		0.43	U				
SEC-BUTYLBENZENE		0.63	U		0.63	U		0.63	U				
STYRENE		0.4	U		0.4	U		0.4	U				
TERT-AMYL METHYL ETHER		0.39	U		0.39	U		0.39	U				
TERT-BUTYLBENZENE		0.51	U		0.51	U		0.51	U				
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C	1.7	UJ	C	1.7	UJ	C			
TETRACHLOROETHENE		0.33	U		0.33	U		0.33	U				
TOLUENE		0.35	U		0.35	U		0.35	U				
TOTAL XYLENES		0.42	U		0.42	U		0.42	U				
TRANS-1,2-DICHLOROETHENE		0.43	U		0.43	U		0.43	U				
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U				
TRICHLOROETHENE		0.36	U		0.36	U		0.36	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW42C-081220			MSA-SW42C-081220-RE			MSA-SW42D-081220			MSA-SW43A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-19			240-134931-19			240-134931-20			240-134931-21		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
CARBON TETRACHLORIDE		0.26	U					0.26	U		0.26	U	
CHLOROBENZENE		0.32	U					0.32	U		0.32	U	
CHLORODIBROMOMETHANE		0.39	U					0.39	U		0.39	U	
CHLORODIFLUOROMETHANE		1	UJ	Q				1	UJ	Q	1	UJ	Q
CHLOROETHANE		0.83	U					0.83	U		0.83	U	
CHLOROFORM		0.4	U					0.4	U		0.4	U	
CHLOROMETHANE		0.64	U					0.64	U		0.64	U	
CIS-1,2-DICHLOROETHENE		0.38	U					0.38	U		0.38	U	
CIS-1,3-DICHLOROPROPENE		0.61	U					0.61	U		0.61	U	
DIBROMOMETHANE		0.33	U					0.33	UJ	C	0.33	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U					0.35	U		0.35	U	
DIISOPROPYL ETHER		0.36	U					0.36	U		0.36	U	
ETHYL TERT-BUTYL ETHER		0.43	U					0.43	U		0.43	U	
ETHYLBENZENE		0.39	U					0.39	U		0.39	U	
HEXACHLOROBUTADIENE		0.83	UJ	C				0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.45	U					0.45	U		0.45	U	
M+P-XYLENES		0.4	U					0.4	U		0.4	U	
METHYL TERT-BUTYL ETHER		0.44	U					0.44	U		0.44	U	
METHYLENE CHLORIDE		1.3	U					1.3	U		1.3	U	
NAPHTHALENE		0.82	U					0.82	U		0.82	U	
N-BUTYLBENZENE		0.59	U					0.59	U		0.59	U	
N-PROPYLBENZENE		0.46	U					0.46	U		0.46	U	
O-XYLENE		0.43	U					0.43	U		0.43	U	
SEC-BUTYLBENZENE		0.63	U					0.63	U		0.63	U	
STYRENE		0.4	U					0.4	U		0.4	U	
TERT-AMYL METHYL ETHER		0.39	U					0.39	U		0.39	U	
TERT-BUTYLBENZENE		0.51	U					0.51	U		0.51	U	
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C				1.7	UJ	C	1.7	UJ	C
TETRACHLOROETHENE		0.33	U					0.33	U		0.33	U	
TOLUENE		0.35	U					0.35	U		0.35	U	
TOTAL XYLENES		0.42	U					0.42	U		0.42	U	
TRANS-1,2-DICHLOROETHENE		0.43	U					0.43	U		0.43	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U					0.67	U		0.67	U	
TRICHLOROETHENE		0.36	U					0.36	U		0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW43B-081220			MSA-SW43C-081220			MSA-SW43D-081220			MSA-SW44A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-22			240-134931-23			240-134931-24			240-134931-25		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.32	U		0.32	U		0.32	U		0.32	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		0.4	U		0.4	U		0.4	U		0.4	U	
CHLOROMETHANE		0.64	U		0.64	U		0.64	U		0.64	U	
CIS-1,2-DICHLOROETHENE		0.38	U		0.38	U		0.38	U		0.38	U	
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.33	UJ	C	0.33	UJ	C	0.33	UJ	C	0.33	UJ	C
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.36	U		0.36	U		0.36	U		0.36	U	
ETHYL TERT-BUTYL ETHER		0.43	U		0.43	U		0.43	U		0.43	U	
ETHYLBENZENE		0.39	U		0.39	U		0.39	U		0.39	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.45	U		0.45	U		0.45	U		0.45	U	
M+P-XYLENES		0.4	U		0.4	U		0.4	U		0.4	U	
METHYL TERT-BUTYL ETHER		0.44	U		0.44	U		0.44	U		0.44	U	
METHYLENE CHLORIDE		1.3	U		1.3	U		1.3	U		1.3	U	
NAPHTHALENE		0.82	U		0.82	U		0.82	U		0.82	U	
N-BUTYLBENZENE		0.59	U		0.59	U		0.59	U		0.59	U	
N-PROPYLBENZENE		0.46	U		0.46	U		0.46	U		0.46	U	
O-XYLENE		0.43	U		0.43	U		0.43	U		0.43	U	
SEC-BUTYLBENZENE		0.63	U		0.63	U		0.63	U		0.63	U	
STYRENE		0.4	U		0.4	U		0.4	U		0.4	U	
TERT-AMYL METHYL ETHER		0.39	U		0.39	U		0.39	U		0.39	U	
TERT-BUTYLBENZENE		0.51	U		0.51	U		0.51	U		0.51	U	
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C	1.7	UJ	C	1.7	UJ	C	1.7	UJ	C
TETRACHLOROETHENE		0.33	U		0.33	U		0.33	U		0.33	U	
TOLUENE		0.35	U		0.35	U		0.35	U		0.35	U	
TOTAL XYLENES		0.42	U		0.42	U		0.42	U		0.42	U	
TRANS-1,2-DICHLOROETHENE		0.43	U		0.43	U		0.43	U		0.43	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.36	U		0.36	U		0.36	U		0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW44B-081220			MSA-SW44C-081220			MSA-SW44D-081220			MSA-SW46A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-26			240-134931-27			240-134931-28			240-134931-30		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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		0.32	U		0.32	U		0.32	U		0.32	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		0.4	U		0.4	U		0.4	U		0.4	U	
CHLOROMETHANE		0.64	U		0.64	U		0.64	U		0.64	U	
CIS-1,2-DICHLOROETHENE		0.38	U		0.38	U		0.38	U		0.72	J	P
CIS-1,3-DICHLOROPROPENE		0.61	U		0.61	U		0.61	U		0.61	U	
DIBROMOMETHANE		0.33	UJ	C	0.33	UJ	C	0.33	UJ	C	0.33	U	
DICHLORODIFLUOROMETHANE		0.35	U		0.35	U		0.35	U		0.35	U	
DIISOPROPYL ETHER		0.36	U		0.36	U		0.36	U		0.36	U	
ETHYL TERT-BUTYL ETHER		0.43	U		0.43	U		0.43	U		0.43	U	
ETHYLBENZENE		0.39	U		0.39	U		0.39	U		0.39	U	
HEXACHLOROBUTADIENE		0.83	UJ	C	0.83	UJ	C	0.83	UJ	C	0.83	UJ	C
ISOPROPYLBENZENE		0.45	U		0.45	U		0.45	U		0.45	U	
M+P-XYLENES		0.4	U		0.4	U		0.4	U		0.4	U	
METHYL TERT-BUTYL ETHER		0.44	U		0.44	U		0.44	U		0.44	U	
METHYLENE CHLORIDE		1.3	U		1.3	U		1.3	U		1.3	U	
NAPHTHALENE		0.82	U		0.82	U		0.82	U		0.82	U	
N-BUTYLBENZENE		0.59	U		0.59	U		0.59	U		0.59	U	
N-PROPYLBENZENE		0.46	U		0.46	U		0.46	U		0.46	U	
O-XYLENE		0.43	U		0.43	U		0.43	U		0.43	U	
SEC-BUTYLBENZENE		0.63	U		0.63	U		0.63	U		0.63	U	
STYRENE		0.4	U		0.4	U		0.4	U		0.4	U	
TERT-AMYL METHYL ETHER		0.39	U		0.39	U		0.39	U		0.39	U	
TERT-BUTYLBENZENE		0.51	U		0.51	U		0.51	U		0.51	U	
TERTIARY-BUTYL ALCOHOL		1.7	UJ	C	1.7	UJ	C	1.7	UJ	C	1.7	UJ	C
TETRACHLOROETHENE		0.33	U		0.33	U		0.33	U		0.33	U	
TOLUENE		0.35	U		0.35	U		0.35	U		0.35	U	
TOTAL XYLENES		0.42	U		0.42	U		0.42	U		0.42	U	
TRANS-1,2-DICHLOROETHENE		0.43	U		0.43	U		0.43	U		0.43	U	
TRANS-1,3-DICHLOROPROPENE		0.67	U		0.67	U		0.67	U		0.67	U	
TRICHLOROETHENE		0.36	U		0.36	U		0.36	U		0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW46A-081220-RE			MSA-SW47A-081220			MSA-SW47A-081220-RE			MSA-SW48A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-30			240-134931-31			240-134931-31			240-134931-32		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
CARBON TETRACHLORIDE					0.26	U					0.26	U	
CHLOROBENZENE					0.32	U					0.32	U	
CHLORODIBROMOMETHANE					0.39	U					0.39	U	
CHLORODIFLUOROMETHANE					1	UJ	Q				1	UJ	Q
CHLOROETHANE					0.83	U					0.83	U	
CHLOROFORM					0.4	U					0.4	U	
CHLOROMETHANE					0.64	U					0.64	U	
CIS-1,2-DICHLOROETHENE					0.42	J	P				0.38	U	
CIS-1,3-DICHLOROPROPENE					0.61	U					0.61	U	
DIBROMOMETHANE					0.33	U					0.33	U	
DICHLORODIFLUOROMETHANE					0.35	U					0.35	U	
DIISOPROPYL ETHER					0.36	U					0.36	U	
ETHYL TERT-BUTYL ETHER					0.43	U					0.43	U	
ETHYLBENZENE					0.39	U					0.39	U	
HEXACHLOROBUTADIENE					0.83	UJ	C				0.83	UJ	C
ISOPROPYLBENZENE					0.45	U					0.45	U	
M+P-XYLENES					0.4	U					0.4	U	
METHYL TERT-BUTYL ETHER					0.44	U					0.44	U	
METHYLENE CHLORIDE					1.3	U					1.3	U	
NAPHTHALENE					0.82	U					0.82	U	
N-BUTYLBENZENE					0.59	U					0.59	U	
N-PROPYLBENZENE					0.46	U					0.46	U	
O-XYLENE					0.43	U					0.43	U	
SEC-BUTYLBENZENE					0.63	U					0.63	U	
STYRENE					0.4	U					0.4	U	
TERT-AMYL METHYL ETHER					0.39	U					0.39	U	
TERT-BUTYLBENZENE					0.51	U					0.51	U	
TERTIARY-BUTYL ALCOHOL					1.7	UJ	C				1.7	UJ	C
TETRACHLOROETHENE					0.33	U					0.33	U	
TOLUENE					0.35	U					0.35	U	
TOTAL XYLENES					0.42	U					0.42	U	
TRANS-1,2-DICHLOROETHENE					0.43	U					0.43	U	
TRANS-1,3-DICHLOROPROPENE					0.67	U					0.67	U	
TRICHLOROETHENE					0.36	U					0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW48A-081220-RE			MSA-SW49A-081220			MSA-SW49A-081220-RE			TB-081220		
SDG: 240-134931-1	LAB_ID	240-134931-32			240-134931-33			240-134931-33			240-134931-29		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
CARBON TETRACHLORIDE					0.26	U					0.26	U	
CHLOROBENZENE					0.32	U					0.32	U	
CHLORODIBROMOMETHANE					0.39	U					0.39	U	
CHLORODIFLUOROMETHANE					1	UJ	Q				1	UJ	Q
CHLOROETHANE					0.83	U					0.83	U	
CHLOROFORM					0.4	U					0.4	U	
CHLOROMETHANE					0.64	U					0.64	U	
CIS-1,2-DICHLOROETHENE					0.5	J	P				0.38	U	
CIS-1,3-DICHLOROPROPENE					0.61	U					0.61	U	
DIBROMOMETHANE					0.33	U					0.33	UJ	C
DICHLORODIFLUOROMETHANE					0.35	U					0.35	U	
DIISOPROPYL ETHER					0.36	U					0.36	U	
ETHYL TERT-BUTYL ETHER					0.43	U					0.43	U	
ETHYLBENZENE					0.39	U					0.39	U	
HEXACHLOROBUTADIENE					0.83	UJ	C				0.83	UJ	C
ISOPROPYLBENZENE					0.45	U					0.45	U	
M+P-XYLENES					0.4	U					0.4	U	
METHYL TERT-BUTYL ETHER					0.44	U					0.44	U	
METHYLENE CHLORIDE					1.3	U					1.3	U	
NAPHTHALENE					0.82	U					0.82	U	
N-BUTYLBENZENE					0.59	U					0.59	U	
N-PROPYLBENZENE					0.46	U					0.46	U	
O-XYLENE					0.43	U					0.43	U	
SEC-BUTYLBENZENE					0.63	U					0.63	U	
STYRENE					0.4	U					0.4	U	
TERT-AMYL METHYL ETHER					0.39	U					0.39	U	
TERT-BUTYLBENZENE					0.51	U					0.51	U	
TERTIARY-BUTYL ALCOHOL					1.7	UJ	C				1.7	UJ	C
TETRACHLOROETHENE					0.33	U					0.33	U	
TOLUENE					0.35	U					0.35	U	
TOTAL XYLENES					0.42	U					0.42	U	
TRANS-1,2-DICHLOROETHENE					0.43	U					0.43	U	
TRANS-1,3-DICHLOROPROPENE					0.67	U					0.67	U	
TRICHLOROETHENE					0.36	U					0.36	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW37A-081220			MSA-SW37A-081220-RE			MSA-SW37B-081220			MSA-SW37B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-1			240-134931-1			240-134931-2			240-134931-2		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
UNKNOWN													
VINYL ACETATE		0.78	U					0.78	U				
VINYL CHLORIDE		0.5	U					0.5	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW37C-081220			MSA-SW37C-081220-RE			MSA-SW37D-081220			MSA-SW37D-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-3			240-134931-3			240-134931-4			240-134931-4		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
UNKNOWN													
VINYL ACETATE		0.78	U					0.78	U				
VINYL CHLORIDE		0.61						0.5	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW38A-081220			MSA-SW38A-081220-RE			MSA-SW38B-081220			MSA-SW38B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-5			240-134931-5			240-134931-6			240-134931-6		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
UNKNOWN													
VINYL ACETATE		0.78	U					0.78	U				
VINYL CHLORIDE		0.51						0.5	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW38C-081220			MSA-SW38D-081220			MSA-SW38D-081220-RE			MSA-SW40A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-7			240-134931-8			240-134931-8			240-134931-9		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE		0.78	U		0.78	U					0.78	U	
VINYL CHLORIDE		0.5	U		0.5	U					0.5	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW40A-081220-RE			MSA-SW40B-081220			MSA-SW40B-081220-RE			MSA-SW40C-081220		
SDG: 240-134931-1	LAB_ID	240-134931-9			240-134931-10			240-134931-10			240-134931-11		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE					0.78	U					0.78	U	
VINYL CHLORIDE					0.5	U					0.5	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW40D-081220			MSA-SW41A-081220			MSA-SW41B-081220			MSA-SW41C-081220		
SDG: 240-134931-1	LAB_ID	240-134931-12			240-134931-13			240-134931-14			240-134931-15		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE		0.78	U		0.78	U		0.78	U		0.78	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW41D-081220			MSA-SW42A-081220			MSA-SW42B-081220			MSA-SW42B-081220-RE		
SDG: 240-134931-1	LAB_ID	240-134931-16			240-134931-17			240-134931-18			240-134931-18		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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				
UNKNOWN		8.7	NJ	Z1									
VINYL ACETATE		0.78	U		0.78	U		0.78	U				
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U				

PROJ_NO: 09023	NSAMPLE	MSA-SW42C-081220			MSA-SW42C-081220-RE			MSA-SW42D-081220			MSA-SW43A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-19			240-134931-19			240-134931-20			240-134931-21		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE		0.78	U					0.78	U		0.78	U	
VINYL CHLORIDE		0.5	U					0.5	U		0.5	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW43B-081220			MSA-SW43C-081220			MSA-SW43D-081220			MSA-SW44A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-22			240-134931-23			240-134931-24			240-134931-25		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE		0.78	U		0.78	U		0.78	U		0.78	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.5	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW44B-081220			MSA-SW44C-081220			MSA-SW44D-081220			MSA-SW46A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-26			240-134931-27			240-134931-28			240-134931-30		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE		0.78	U		0.78	U		0.78	U		0.78	U	
VINYL CHLORIDE		0.5	U		0.5	U		0.5	U		0.56		

PROJ_NO: 09023	NSAMPLE	MSA-SW46A-081220-RE			MSA-SW47A-081220			MSA-SW47A-081220-RE			MSA-SW48A-081220		
SDG: 240-134931-1	LAB_ID	240-134931-30			240-134931-31			240-134931-31			240-134931-32		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE					0.78	U					0.78	U	
VINYL CHLORIDE					0.5	U					0.5	U	

PROJ_NO: 09023	NSAMPLE	MSA-SW48A-081220-RE			MSA-SW49A-081220			MSA-SW49A-081220-RE			TB-081220		
SDG: 240-134931-1	LAB_ID	240-134931-32			240-134931-33			240-134931-33			240-134931-29		
FRACTION: OV	SAMP_DATE	8/12/2020			8/12/2020			8/12/2020			8/12/2020		
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	
UNKNOWN													
VINYL ACETATE					0.78	U					0.78	U	
VINYL CHLORIDE					0.5	U					0.5	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	102		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 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
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916426.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916426.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	17		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916427.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.7		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916427.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.61		0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	97		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916428.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.6		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916428.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		75-130
460-00-4	4-Bromofluorobenzene (Surr)	91		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	102		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916429.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.4		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		75-130
460-00-4	4-Bromofluorobenzene (Surr)	88		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916429.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	0.46	J	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.62	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.51		0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916430.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	9.3		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916430.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916431.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	8.4		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	108		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916431.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916432.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.7		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916432.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916433.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	10		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916433.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916434.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	7.2		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	89		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916434.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	8.0		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.7		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	9.2		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	89		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	8.7		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	7.1		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 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)	94		75-130
460-00-4	4-Bromofluorobenzene (Surr)	110		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

Number TICs Found: 1 TIC Result Total: 8.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	10.20	8.7	T J	

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	11		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 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)	93		75-130
460-00-4	4-Bromofluorobenzene (Surr)	106		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916435.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	8.1		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916435.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916436.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	7.6		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916436.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	10		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	9.1		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	7.1		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	6.7		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	10		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	101		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	6.6		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	6.3		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.72	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.56		0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916437.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	12		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	91		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916437.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.42	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		75-130
460-00-4	4-Bromofluorobenzene (Surr)	88		47-134
2037-26-5	Toluene-d8 (Surr)	100		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916438.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	10		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916438.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916439.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	11		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	89		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916439.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.50	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916440.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	12		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916440.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Appendix C

Support Documentation

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

1-7126

Baltimore
#201

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Josh Mullis	Site Contact: Josh Mullis	Date: 8/12/2020	COC No:
Tetra Tech	Tel/Fax: 410-279-2700	Lab Contact: Roxanne C.	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 STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: J Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC09023	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Sample Specific Notes:
MSA-SW37A-081220	8/12/2020	1018	SW	Water	3		x	
MSA-SW37B-081220	8/12/2020	1021	SW	Water	3		x	
MSA-SW37C-081220	8/12/2020	1023	SW	Water	3		x	
MSA-SW37D-081220	8/12/2020	1025	SW	Water	3		x	
MSA-SW38A-081220	8/12/2020	0933	SW	Water	3		x	
MSA-SW38B-081220	8/12/2020	0936	SW	Water	3		x	
MSA-SW38C-081220	8/12/2020	0939	SW	Water	3		x	
MSA-SW38D-081220	8/12/2020	0941	SW	Water	3		x	
MSA-SW40A-081220	8/12/2020	0951	SW	Water	3		x	
MSA-SW40B-081220	8/12/2020	0953	SW	Water	3		x	
MSA-SW40C-081220	8/12/2020	0956	SW	Water	3		x	
MSA-SW40D-081220	8/12/2020	0959	SW	Water	3		x	
							2	



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~~

JAM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/12/20 1415		ETA Lab	8/12/20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	8/12/20 1715	ETA Lab		ETA	8-13-20 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

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08/23/2020

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

1-7/2.6

Baltimore
#201

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Josh Mullis	Site Contact: Josh Mullis	Date: 8/12/2020	COC No:
Tetra Tech	Tel/Fax: 410-279-2700	Lab Contact: Roxanne C.	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: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: J Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC09023	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)
MSA-SW41A-081220	8/12/2020	0917	SW	Water	3		x
MSA-SW41B-081220	8/12/2020	0920	SW	Water	3		x
MSA-SW41C-081220	8/12/2020	0922	SW	Water	3		x
MSA-SW41D-081220	8/12/2020	0925	SW	Water	3		x
MSA-SW42A-081220	8/12/2020	1006	SW	Water	3		x
MSA-SW42B-081220	8/12/2020	1008	SW	Water	3		x
MSA-SW42C-081220	8/12/2020	1010	SW	Water	3		x
MSA-SW42D-081220	8/12/2020	1013	SW	Water	3		x
MSA-SW43A-081220	8/12/2020	0903	SW	Water	3		x
MSA-SW43B-081220	8/12/2020	0905	SW	Water	3		x
MSA-SW43C-081220	8/12/2020	0907	SW	Water	3		x
MSA-SW43D-081220	8/12/2020	0910	SW	Water	3		x
							2

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~~ JAM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/12/2020 1715		ETA Lab	8/12/20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	8/10/20 17:a	ETA Lab		ETA	8-13-20 1032
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

08/23/2020

Baltimore
1-7/26 #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: Josh Mullis	Site Contact: Josh Mullis	Date: 8/12/2020	COC No:
Tetra Tech	Tel/Fax: 410-279-2700	Lab Contact: Roxanne C.	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: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			Sampler: J Mullis
Project # 112IC09023	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Sample Specific Notes:
MSA-SW44A-081220	8/12/2020	0847	SW	Water	3		x	
MSA-SW44B-081220	8/12/2020	0851	SW	Water	3		x	
MSA-SW44C-081220	8/12/2020	0854	SW	Water	3		x	
MSA-SW44D-081220	8/12/2020	0858	SW	Water	3		x	
TB-081220	8/12/2020	0000	SW	Water	3		x	
MSA-SW46A-081220	8/12/2020	1002	SW	Water	3		x	
MSA-SW47A-081220	8/12/2020	0946	SW	Water	3		x	
MSA-SW48A-081220	8/12/2020	0929	SW	Water	3		x	
MSA-SW49A-081220	8/12/2020	0914	SW	Water	3		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2

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~~ JAH

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/12/2020 1415		ETA by 17	8/12/20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	8/12/20 17:00	ETA by 10		ETA	8/13/20 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

08/23/2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 134931**
Canton Facility

Client Tetra Tech Site Name

Cooler Received on 8-13-20 Opened on 8-13-20

Cooler unpacked by: Matt Snyder

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.7 °C Corrected Cooler Temp 2.6 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC911298
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:

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:

eurofins | Environment Testing America

ANALYTICAL REPORT

Job Number: 240-134931-1

SDG Number: MSA FMC

Job Description: MSA Surface Water

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Roxanne Cisneros

Approved for release.
Roxanne Cisneros
Senior Project Manager
8/23/2020 12:46 PM

Roxanne Cisneros, Senior Project Manager
4101 Shuffel Street NW, North Canton, OH, 44720
(615)301-5761
roxanne.cisneros@Eurofinset.com
08/23/2020

cc: Samantha Brenner
Kelly Carper

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the 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. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water

Report Number: 240-134931-1

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.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 8/13/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-081220 (240-134931-1), MSA-SW37B-081220 (240-134931-2), MSA-SW37C-081220 (240-134931-3), MSA-SW37D-081220 (240-134931-4), MSA-SW38A-081220 (240-134931-5), MSA-SW38B-081220 (240-134931-6), MSA-SW38C-081220 (240-134931-7), MSA-SW38D-081220 (240-134931-8), MSA-SW40A-081220 (240-134931-9), MSA-SW40B-081220 (240-134931-10), MSA-SW40C-081220 (240-134931-11), MSA-SW40D-081220 (240-134931-12), MSA-SW41A-081220 (240-134931-13), MSA-SW41B-081220 (240-134931-14), MSA-SW41C-081220 (240-134931-15), MSA-SW41D-081220 (240-134931-16), MSA-SW42A-081220 (240-134931-17), MSA-SW42B-081220 (240-134931-18), MSA-SW42C-081220 (240-134931-19), MSA-SW42D-081220 (240-134931-20), MSA-SW43A-081220 (240-134931-21), MSA-SW43B-081220 (240-134931-22), MSA-SW43C-081220 (240-134931-23), MSA-SW43D-081220 (240-134931-24), MSA-SW44A-081220 (240-134931-25), MSA-SW44B-081220 (240-134931-26), MSA-SW44C-081220 (240-134931-27), MSA-SW44D-081220 (240-134931-28), TB-081220 (240-134931-29), MSA-SW46A-081220 (240-134931-30), MSA-SW47A-081220 (240-134931-31), MSA-SW48A-081220 (240-134931-32) and MSA-SW49A-081220 (240-134931-33) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/14/2020, 08/15/2020, 08/17/2020, 08/18/2020, 08/19/2020 and 08/20/2020.

2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447281/5. 2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447506/5. 2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447698/5. 2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447867/5. Refer to the QC report for details.

Method 8260C: The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): MSA-SW44C-081220 (240-134931-27).

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447281 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW42D-081220 (240-134931-20),

MSA-SW43A-081220 (240-134931-21), MSA-SW43B-081220 (240-134931-22), MSA-SW43C-081220 (240-134931-23), MSA-SW43D-081220 (240-134931-24), MSA-SW44A-081220 (240-134931-25), MSA-SW44B-081220 (240-134931-26), MSA-SW44D-081220 (240-134931-28) and TB-081220 (240-134931-29). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 240-447281 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 analyte(s) is considered estimated.

Method 8260C: Batch analytical batch 240-447281 is reported without a matrix spike/matrix spike duplicate (MS/MSD), because the batch MS/MSD was canceled. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447506 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 240-447506 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 analyte(s) is considered estimated.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW37A-081220 (240-134931-1), MSA-SW37B-081220 (240-134931-2), MSA-SW37C-081220 (240-134931-3), MSA-SW37D-081220 (240-134931-4), MSA-SW38A-081220 (240-134931-5), MSA-SW38B-081220 (240-134931-6), MSA-SW38C-081220 (240-134931-7), MSA-SW38D-081220 (240-134931-8), MSA-SW40A-081220 (240-134931-9), MSA-SW40B-081220 (240-134931-10), MSA-SW42B-081220 (240-134931-18), MSA-SW42C-081220 (240-134931-19), MSA-SW46A-081220 (240-134931-30), MSA-SW47A-081220 (240-134931-31), MSA-SW48A-081220 (240-134931-32) and MSA-SW49A-081220 (240-134931-33). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447698 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 240-447698 recovered above the upper control limit for dibromomethane, and 1,1,2,2-tetrachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MSA-SW40C-081220 (240-134931-11), MSA-SW40D-081220 (240-134931-12), MSA-SW41A-081220 (240-134931-13), MSA-SW41B-081220 (240-134931-14), MSA-SW41C-081220 (240-134931-15) and (CCVIS 240-447698/4).

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW40C-081220 (240-134931-11), MSA-SW40D-081220 (240-134931-12), MSA-SW41A-081220 (240-134931-13), MSA-SW41B-081220 (240-134931-14) and MSA-SW41C-081220 (240-134931-15). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-447698.

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447867 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW41D-081220 (240-134931-16) and MSA-SW42A-081220 (240-134931-17). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) associated with batch 240-447867 recovered above the upper control limit for 2-methyl-2-propanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MSA-SW41D-081220 (240-134931-16), MSA-SW42A-081220 (240-134931-17) and (CCVIS 240-447867/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 240-134931-1
Project/Site: MSA Surface Water SDG: MSA Frog Mortar Creek

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-134931-1	MSA-SW37A-081220	Water	08/12/20 10:18	08/13/20 10:30	
240-134931-2	MSA-SW37B-081220	Water	08/12/20 10:21	08/13/20 10:30	
240-134931-3	MSA-SW37C-081220	Water	08/12/20 10:23	08/13/20 10:30	
240-134931-4	MSA-SW37D-081220	Water	08/12/20 10:25	08/13/20 10:30	
240-134931-5	MSA-SW38A-081220	Water	08/12/20 09:33	08/13/20 10:30	
240-134931-6	MSA-SW38B-081220	Water	08/12/20 09:36	08/13/20 10:30	
240-134931-7	MSA-SW38C-081220	Water	08/12/20 09:39	08/13/20 10:30	
240-134931-8	MSA-SW38D-081220	Water	08/12/20 09:41	08/13/20 10:30	
240-134931-9	MSA-SW40A-081220	Water	08/12/20 09:51	08/13/20 10:30	
240-134931-10	MSA-SW40B-081220	Water	08/12/20 09:53	08/13/20 10:30	
240-134931-11	MSA-SW40C-081220	Water	08/12/20 09:56	08/13/20 10:30	
240-134931-12	MSA-SW40D-081220	Water	08/12/20 00:09	08/13/20 10:30	
240-134931-13	MSA-SW41A-081220	Water	08/12/20 09:17	08/13/20 10:30	
240-134931-14	MSA-SW41B-081220	Water	08/12/20 09:20	08/13/20 10:30	
240-134931-15	MSA-SW41C-081220	Water	08/12/20 09:22	08/13/20 10:30	
240-134931-16	MSA-SW41D-081220	Water	08/12/20 09:25	08/13/20 10:30	
240-134931-17	MSA-SW42A-081220	Water	08/12/20 10:06	08/13/20 10:30	
240-134931-18	MSA-SW42B-081220	Water	08/12/20 10:08	08/13/20 10:30	
240-134931-19	MSA-SW42C-081220	Water	08/12/20 10:10	08/13/20 10:30	
240-134931-20	MSA-SW42D-081220	Water	08/12/20 10:13	08/13/20 10:30	
240-134931-21	MSA-SW43A-081220	Water	08/12/20 09:03	08/13/20 10:30	
240-134931-22	MSA-SW43B-081220	Water	08/12/20 09:05	08/13/20 10:30	
240-134931-23	MSA-SW43C-081220	Water	08/12/20 09:07	08/13/20 10:30	
240-134931-24	MSA-SW43D-081220	Water	08/12/20 09:10	08/13/20 10:30	
240-134931-25	MSA-SW44A-081220	Water	08/12/20 08:47	08/13/20 10:30	
240-134931-26	MSA-SW44B-081220	Water	08/12/20 08:51	08/13/20 10:30	
240-134931-27	MSA-SW44C-081220	Water	08/12/20 08:54	08/13/20 10:30	
240-134931-28	MSA-SW44D-081220	Water	08/12/20 08:58	08/13/20 10:30	
240-134931-29	TB-081220	Water	08/12/20 00:00	08/13/20 10:30	
240-134931-30	MSA-SW46A-081220	Water	08/12/20 10:02	08/13/20 10:30	
240-134931-31	MSA-SW47A-081220	Water	08/12/20 09:46	08/13/20 10:30	
240-134931-32	MSA-SW48A-081220	Water	08/12/20 09:29	08/13/20 10:30	
240-134931-33	MSA-SW49A-081220	Water	08/12/20 09:14	08/13/20 10:30	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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-081220	240-134931-1	102	99	103	92
MSA-SW37A-081220	240-134931-1	106	104	105	93
MSA-SW37B-081220	240-134931-2	106	104	107	94
MSA-SW37B-081220	240-134931-2	107	104	108	95
MSA-SW37C-081220	240-134931-3	107	106	106	97
MSA-SW37C-081220	240-134931-3	105	103	104	93
MSA-SW37D-081220	240-134931-4	102	101	103	91
MSA-SW37D-081220	240-134931-4	103	100	101	88
MSA-SW38A-081220	240-134931-5	105	102	105	93
MSA-SW38A-081220	240-134931-5	106	105	105	95
MSA-SW38B-081220	240-134931-6	104	104	103	93
MSA-SW38B-081220	240-134931-6	108	106	107	93
MSA-SW38C-081220	240-134931-7	105	104	105	95
MSA-SW38D-081220	240-134931-8	106	103	105	95
MSA-SW38D-081220	240-134931-8	106	106	106	90
MSA-SW40A-081220	240-134931-9	103	103	104	94
MSA-SW40A-081220	240-134931-9	103	102	102	90
MSA-SW40B-081220	240-134931-10	107	104	106	94
MSA-SW40B-081220	240-134931-10	105	102	103	89
MSA-SW40C-081220	240-134931-11	105	105	105	94
MSA-SW40D-081220	240-134931-12	104	104	101	92
MSA-SW41A-081220	240-134931-13	104	103	103	89
MSA-SW41B-081220	240-134931-14	106	105	107	93
MSA-SW41C-081220	240-134931-15	107	106	103	92
MSA-SW41D-081220	240-134931-16	89	94	102	110
MSA-SW42A-081220	240-134931-17	89	93	101	106
MSA-SW42B-081220	240-134931-18	107	106	105	95
MSA-SW42B-081220	240-134931-18	105	104	105	93
MSA-SW42C-081220	240-134931-19	104	102	103	93
MSA-SW42C-081220	240-134931-19	105	104	106	94
MSA-SW42D-081220	240-134931-20	106	105	105	94
MSA-SW43A-081220	240-134931-21	105	103	104	94
MSA-SW43B-081220	240-134931-22	106	104	105	94
MSA-SW43C-081220	240-134931-23	105	104	105	92
MSA-SW43D-081220	240-134931-24	103	103	103	93

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-129
DCA = 1,2-Dichloroethane-d4 (Surr)	75-130
TOL = Toluene-d8 (Surr)	69-122
BFB = 4-Bromofluorobenzene (Surr)	47-134

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MSA-SW44A-081220	240-134931-25	101	101	102	92
MSA-SW44B-081220	240-134931-26	106	107	106	95
MSA-SW44C-081220	240-134931-27	105	105	103	93
MSA-SW44D-081220	240-134931-28	104	104	105	93
TB-081220	240-134931-29	105	105	104	92
MSA-SW46A-081220	240-134931-30	104	102	101	90
MSA-SW46A-081220	240-134931-30	105	105	106	91
MSA-SW47A-081220	240-134931-31	103	101	100	88
MSA-SW47A-081220	240-134931-31	107	106	105	92
MSA-SW48A-081220	240-134931-32	106	105	105	93
MSA-SW48A-081220	240-134931-32	106	104	102	89
MSA-SW49A-081220	240-134931-33	107	106	106	93
MSA-SW49A-081220	240-134931-33	107	106	108	94
	MB 240-447281/8	105	103	106	96
	MB 240-447506/8	104	104	108	96
	MB 240-447698/8	105	104	107	97
	MB 240-447867/8	83	87	96	101
	LCS 240-447281/5	96	93	108	102
	LCS 240-447506/5	97	96	109	106
	LCS 240-447698/5	99	97	110	105
	LCS 240-447867/5	89	90	100	107
	200-54623-C-4 MS	96	93	107	102
	240-135021-B-1 MS	92	92	103	109
	200-54623-C-4 MSD	96	94	107	102
	240-135021-B-1 MSD	93	94	105	110

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-129
DCA = 1,2-Dichloroethane-d4 (Surr)	75-130
TOL = Toluene-d8 (Surr)	69-122
BFB = 4-Bromofluorobenzene (Surr)	47-134

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916362.d

Lab ID: LCS 240-447281/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.0	100	77-120	
1,1,1-Trichloroethane	20.0	18.5	93	65-141	
1,1,2,2-Tetrachloroethane	20.0	23.6	118	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	20.4	102	54-148	
1,1-Dichloroethane	20.0	21.1	105	74-126	
1,1-Dichloroethene	20.0	19.4	97	73-129	
1,1-Dichloropropene	20.0	20.4	102	78-120	
1,2,3-Trichlorobenzene	20.0	18.5	93	42-126	
1,2,3-Trichloropropane	20.0	21.3	107	57-137	
1,2,4-Trichlorobenzene	20.0	16.7	83	47-120	
1,2,4-Trimethylbenzene	20.0	21.2	106	66-129	
1,2-Dibromo-3-Chloropropane	20.0	19.8	99	34-136	
1,2-Dichlorobenzene	20.0	20.9	104	74-120	
1,2-Dichloroethane	20.0	18.0	90	66-129	
1,2-Dichloropropane	20.0	21.6	108	79-127	
1,3-Dichlorobenzene	20.0	19.3	96	74-120	
1,3-Dichloropropane	20.0	21.8	109	74-122	
1,4-Dichlorobenzene	20.0	19.1	95	75-120	
2,2-Dichloropropane	20.0	22.4	112	67-137	
2-Chloroethyl vinyl ether	20.0	39.3	196	29-146	*
2-Chlorotoluene	20.0	21.3	106	73-126	
2-Hexanone	40.0	42.9	107	43-142	
Bromobenzene	20.0	19.3	96	77-120	
Bromochloromethane	20.0	19.8	99	70-128	
4-Chlorotoluene	20.0	20.5	102	73-126	
p-Isopropyltoluene	20.0	20.2	101	66-127	
Acetone	40.0	48.4	121	33-155	
Benzene	20.0	21.4	107	77-123	
Bromoform	20.0	17.3	86	47-133	
Bromomethane	20.0	18.5	92	48-144	
Carbon disulfide	20.0	19.5	98	67-127	
Carbon tetrachloride	20.0	17.7	88	61-142	
Chlorobenzene	20.0	20.3	102	80-120	
Chloroethane	20.0	21.7	108	41-147	
Chloroform	20.0	19.8	99	74-127	
Chloromethane	20.0	20.8	104	46-148	
cis-1,2-Dichloroethene	20.0	19.2	96	75-124	
cis-1,3-Dichloropropene	20.0	19.3	97	68-128	
Hexachlorobutadiene	20.0	14.1	71	40-120	
Dibromomethane	20.0	16.2	81	67-121	
Bromodichloromethane	20.0	18.6	93	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916362.d

Lab ID: LCS 240-447281/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	17.2	86	35-137	
Ethylbenzene	20.0	20.5	102	80-120	
1,2-Dibromoethane	20.0	19.6	98	73-120	
Naphthalene	20.0	20.8	104	28-130	
m-Xylene & p-Xylene	20.0	20.8	104	79-121	
n-Butylbenzene	20.0	20.1	100	54-129	
Isopropylbenzene	20.0	20.7	103	73-123	
n-Propylbenzene	20.0	21.0	105	67-130	
2-Butanone	40.0	40.1	100	41-151	
4-Methyl-2-pentanone	40.0	41.4	103	43-145	
sec-Butylbenzene	20.0	20.6	103	60-131	
Methyl tert-butyl ether	20.0	19.4	97	57-127	
Methylene Chloride	20.0	20.6	103	63-134	
o-Xylene	20.0	21.1	105	75-123	
Styrene	20.0	20.7	103	75-121	
tert-Butylbenzene	20.0	19.6	98	63-126	
Tetrachloroethene	20.0	18.1	91	70-125	
Toluene	20.0	21.5	108	79-122	
trans-1,2-Dichloroethene	20.0	20.4	102	74-130	
trans-1,3-Dichloropropene	20.0	19.6	98	64-120	
Trichloroethene	20.0	18.2	91	71-121	
Trichlorofluoromethane	20.0	16.9	84	52-148	
Vinyl acetate	20.0	21.5	107	44-160	
Vinyl chloride	20.0	21.4	107	61-134	
tert-Butyl alcohol	200	225	112	15-169	
Xylenes, Total	40.0	41.9	105	78-122	
Dibromochloromethane	20.0	19.3	97	75-120	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916392.d

Lab ID: LCS 240-447506/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.2	101	77-120	
1,1,1-Trichloroethane	20.0	18.4	92	65-141	
1,1,2,2-Tetrachloroethane	20.0	24.2	121	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.9	100	54-148	
1,1-Dichloroethane	20.0	21.1	106	74-126	
1,1-Dichloroethene	20.0	19.4	97	73-129	
1,1-Dichloropropene	20.0	20.6	103	78-120	
1,2,3-Trichlorobenzene	20.0	18.8	94	42-126	
1,2,3-Trichloropropane	20.0	21.0	105	57-137	
1,2,4-Trichlorobenzene	20.0	17.3	86	47-120	
1,2,4-Trimethylbenzene	20.0	20.8	104	66-129	
1,2-Dibromo-3-Chloropropane	20.0	20.9	105	34-136	
1,2-Dichlorobenzene	20.0	20.8	104	74-120	
1,2-Dichloroethane	20.0	18.4	92	66-129	
1,2-Dichloropropane	20.0	21.6	108	79-127	
1,3-Dichlorobenzene	20.0	19.4	97	74-120	
1,3-Dichloropropane	20.0	21.8	109	74-122	
1,4-Dichlorobenzene	20.0	18.8	94	75-120	
2,2-Dichloropropane	20.0	23.5	117	67-137	
2-Chloroethyl vinyl ether	20.0	39.4	197	29-146	*
2-Chlorotoluene	20.0	21.0	105	73-126	
2-Hexanone	40.0	44.7	112	43-142	
Bromobenzene	20.0	18.6	93	77-120	
Bromochloromethane	20.0	21.0	105	70-128	
4-Chlorotoluene	20.0	20.1	100	73-126	
p-Isopropyltoluene	20.0	19.8	99	66-127	
Acetone	40.0	57.4	143	33-155	
Benzene	20.0	21.5	108	77-123	
Bromoform	20.0	18.0	90	47-133	
Bromomethane	20.0	18.5	93	48-144	
Carbon disulfide	20.0	19.7	99	67-127	
Carbon tetrachloride	20.0	17.8	89	61-142	
Chlorobenzene	20.0	20.3	102	80-120	
Chloroethane	20.0	21.4	107	41-147	
Chloroform	20.0	20.0	100	74-127	
Chloromethane	20.0	20.4	102	46-148	
cis-1,2-Dichloroethene	20.0	19.7	99	75-124	
cis-1,3-Dichloropropene	20.0	19.7	98	68-128	
Hexachlorobutadiene	20.0	14.3	72	40-120	
Dibromomethane	20.0	16.3	82	67-121	
Bromodichloromethane	20.0	18.5	93	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916392.d

Lab ID: LCS 240-447506/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	17.5	88	35-137	
Ethylbenzene	20.0	20.6	103	80-120	
1,2-Dibromoethane	20.0	20.0	100	73-120	
Naphthalene	20.0	21.6	108	28-130	
m-Xylene & p-Xylene	20.0	21.1	106	79-121	
n-Butylbenzene	20.0	20.1	100	54-129	
Isopropylbenzene	20.0	20.9	104	73-123	
n-Propylbenzene	20.0	21.0	105	67-130	
2-Butanone	40.0	45.4	113	41-151	
4-Methyl-2-pentanone	40.0	43.7	109	43-145	
sec-Butylbenzene	20.0	20.0	100	60-131	
Methyl tert-butyl ether	20.0	20.0	100	57-127	
Methylene Chloride	20.0	20.8	104	63-134	
o-Xylene	20.0	21.3	107	75-123	
Styrene	20.0	21.0	105	75-121	
tert-Butylbenzene	20.0	18.9	94	63-126	
Tetrachloroethene	20.0	18.4	92	70-125	
Toluene	20.0	21.9	110	79-122	
trans-1,2-Dichloroethene	20.0	20.3	101	74-130	
trans-1,3-Dichloropropene	20.0	19.9	99	64-120	
Trichloroethene	20.0	18.3	91	71-121	
Trichlorofluoromethane	20.0	17.0	85	52-148	
Vinyl acetate	20.0	21.7	109	44-160	
Vinyl chloride	20.0	21.4	107	61-134	
tert-Butyl alcohol	200	338	169	15-169	
Xylenes, Total	40.0	42.4	106	78-122	
Dibromochloromethane	20.0	19.4	97	75-120	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916422.d

Lab ID: LCS 240-447698/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	19.3	96	77-120	
1,1,1-Trichloroethane	20.0	15.8	79	65-141	
1,1,2,2-Tetrachloroethane	20.0	23.3	116	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	17.1	86	54-148	
1,1-Dichloroethane	20.0	19.9	99	74-126	
1,1-Dichloroethene	20.0	16.9	85	73-129	
1,1-Dichloropropene	20.0	17.8	89	78-120	
1,2,3-Trichlorobenzene	20.0	18.1	91	42-126	
1,2,3-Trichloropropane	20.0	20.9	105	57-137	
1,2,4-Trichlorobenzene	20.0	16.1	81	47-120	
1,2,4-Trimethylbenzene	20.0	19.5	98	66-129	
1,2-Dibromo-3-Chloropropane	20.0	19.9	100	34-136	
1,2-Dichlorobenzene	20.0	20.1	100	74-120	
1,2-Dichloroethane	20.0	18.1	91	66-129	
1,2-Dichloropropane	20.0	20.7	103	79-127	
1,3-Dichlorobenzene	20.0	18.4	92	74-120	
1,3-Dichloropropane	20.0	21.5	107	74-122	
1,4-Dichlorobenzene	20.0	18.2	91	75-120	
2,2-Dichloropropane	20.0	18.3	92	67-137	
2-Chloroethyl vinyl ether	20.0	39.8	199	29-146	*
2-Chlorotoluene	20.0	19.5	98	73-126	
2-Hexanone	40.0	43.7	109	43-142	
Bromobenzene	20.0	18.1	91	77-120	
Bromochloromethane	20.0	20.1	101	70-128	
4-Chlorotoluene	20.0	19.0	95	73-126	
p-Isopropyltoluene	20.0	17.5	87	66-127	
Acetone	40.0	52.6	131	33-155	
Benzene	20.0	20.1	100	77-123	
Bromoform	20.0	17.1	86	47-133	
Bromomethane	20.0	19.1	96	48-144	
Carbon disulfide	20.0	17.0	85	67-127	
Carbon tetrachloride	20.0	14.9	74	61-142	
Chlorobenzene	20.0	19.2	96	80-120	
Chloroethane	20.0	22.1	111	41-147	
Chloroform	20.0	19.4	97	74-127	
Chloromethane	20.0	22.2	111	46-148	
cis-1,2-Dichloroethene	20.0	18.7	93	75-124	
cis-1,3-Dichloropropene	20.0	19.3	96	68-128	
Hexachlorobutadiene	20.0	13.0	65	40-120	
Dibromomethane	20.0	15.7	79	67-121	
Bromodichloromethane	20.0	17.9	89	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916422.d

Lab ID: LCS 240-447698/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	19.9	99	35-137	
Ethylbenzene	20.0	18.5	93	80-120	
1,2-Dibromoethane	20.0	19.3	96	73-120	
Naphthalene	20.0	20.8	104	28-130	
m-Xylene & p-Xylene	20.0	19.3	96	79-121	
n-Butylbenzene	20.0	17.5	88	54-129	
Isopropylbenzene	20.0	18.2	91	73-123	
n-Propylbenzene	20.0	18.5	93	67-130	
2-Butanone	40.0	43.3	108	41-151	
4-Methyl-2-pentanone	40.0	42.5	106	43-145	
sec-Butylbenzene	20.0	17.4	87	60-131	
Methyl tert-butyl ether	20.0	18.5	92	57-127	
Methylene Chloride	20.0	20.1	101	63-134	
o-Xylene	20.0	19.7	99	75-123	
Styrene	20.0	20.2	101	75-121	
tert-Butylbenzene	20.0	16.6	83	63-126	
Tetrachloroethene	20.0	16.0	80	70-125	
Toluene	20.0	20.1	101	79-122	
trans-1,2-Dichloroethene	20.0	18.7	94	74-130	
trans-1,3-Dichloropropene	20.0	19.4	97	64-120	
Trichloroethene	20.0	16.4	82	71-121	
Trichlorofluoromethane	20.0	17.5	87	52-148	
Vinyl acetate	20.0	20.8	104	44-160	
Vinyl chloride	20.0	22.2	111	61-134	
tert-Butyl alcohol	200	265	133	15-169	
Xylenes, Total	40.0	39.0	98	78-122	
Dibromochloromethane	20.0	18.9	95	75-120	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279809.D

Lab ID: LCS 240-447867/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.5	102	77-120	
1,1,1-Trichloroethane	20.0	19.8	99	65-141	
1,1,2,2-Tetrachloroethane	20.0	21.4	107	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.7	108	54-148	
1,1-Dichloroethane	20.0	20.7	103	74-126	
1,1-Dichloroethene	20.0	21.1	105	73-129	
1,1-Dichloropropene	20.0	20.7	104	78-120	
1,2,3-Trichlorobenzene	20.0	23.0	115	42-126	
1,2,3-Trichloropropane	20.0	21.0	105	57-137	
1,2,4-Trichlorobenzene	20.0	22.7	113	47-120	
1,2,4-Trimethylbenzene	20.0	21.6	108	66-129	
1,2-Dibromo-3-Chloropropane	20.0	23.5	118	34-136	
1,2-Dichlorobenzene	20.0	20.4	102	74-120	
1,2-Dichloroethane	20.0	18.3	92	66-129	
1,2-Dichloropropane	20.0	21.5	107	79-127	
1,3-Dichlorobenzene	20.0	21.0	105	74-120	
1,3-Dichloropropane	20.0	20.5	102	74-122	
1,4-Dichlorobenzene	20.0	20.3	102	75-120	
2,2-Dichloropropane	20.0	19.4	97	67-137	
2-Chloroethyl vinyl ether	20.0	44.3	221	29-146	*
2-Chlorotoluene	20.0	21.2	106	73-126	
2-Hexanone	40.0	45.2	113	43-142	
Bromobenzene	20.0	21.0	105	77-120	
Bromochloromethane	20.0	18.4	92	70-128	
4-Chlorotoluene	20.0	21.0	105	73-126	
p-Isopropyltoluene	20.0	23.0	115	66-127	
Acetone	40.0	43.5	109	33-155	
Benzene	20.0	19.7	99	77-123	
Bromoform	20.0	21.4	107	47-133	
Bromomethane	20.0	18.4	92	48-144	
Carbon disulfide	20.0	21.6	108	67-127	
Carbon tetrachloride	20.0	20.0	100	61-142	
Chlorobenzene	20.0	20.7	104	80-120	
Chloroethane	20.0	19.1	96	41-147	
Chloroform	20.0	18.5	92	74-127	
Chloromethane	20.0	22.4	112	46-148	
cis-1,2-Dichloroethene	20.0	17.0	85	75-124	
cis-1,3-Dichloropropene	20.0	21.2	106	68-128	
Hexachlorobutadiene	20.0	22.1	110	40-120	
Dibromomethane	20.0	18.7	94	67-121	
Bromodichloromethane	20.0	20.0	100	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279809.D

Lab ID: LCS 240-447867/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	23.9	119	35-137	
Ethylbenzene	20.0	21.9	109	80-120	
1,2-Dibromoethane	20.0	20.1	101	73-120	
Naphthalene	20.0	24.0	120	28-130	
m-Xylene & p-Xylene	20.0	22.0	110	79-121	
n-Butylbenzene	20.0	23.1	116	54-129	
Isopropylbenzene	20.0	21.6	108	73-123	
n-Propylbenzene	20.0	23.1	116	67-130	
2-Butanone	40.0	40.6	102	41-151	
4-Methyl-2-pentanone	40.0	43.4	109	43-145	
sec-Butylbenzene	20.0	22.2	111	60-131	
Methyl tert-butyl ether	20.0	20.0	100	57-127	
Methylene Chloride	20.0	21.5	107	63-134	
o-Xylene	20.0	20.7	104	75-123	
Styrene	20.0	21.3	106	75-121	
tert-Butylbenzene	20.0	22.4	112	63-126	
Tetrachloroethene	20.0	20.3	101	70-125	
Toluene	20.0	20.2	101	79-122	
trans-1,2-Dichloroethene	20.0	21.9	109	74-130	
trans-1,3-Dichloropropene	20.0	21.1	106	64-120	
Trichloroethene	20.0	20.6	103	71-121	
Trichlorofluoromethane	20.0	19.1	96	52-148	
Vinyl acetate	20.0	18.5	93	44-160	
Vinyl chloride	20.0	21.9	109	61-134	
tert-Butyl alcohol	200	234	117	15-169	
Xylenes, Total	40.0	42.7	107	78-122	
Dibromochloromethane	20.0	20.1	100	75-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916401.d

Lab ID: 200-54623-C-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	20 U	407	102	67-120	
1,1,1-Trichloroethane	400	20 U	360	90	62-135	
1,1,2,2-Tetrachloroethane	400	20 U	490	122	37-149	
1,1,2-Trichlorotrifluoroethane (Freon 113)	400	20 U	406	102	41-145	
1,1-Dichloroethane	400	20 U	432	108	71-121	
1,1-Dichloroethene	400	20 U	393	98	64-132	
1,1-Dichloropropene	400	20 U	414	103	56-126	
1,2,3-Trichlorobenzene	400	20 U	348	87	32-122	
1,2,3-Trichloropropane	400	20 U	435	109	53-137	
1,2,4-Trichlorobenzene	400	20 U	309	77	37-120	
1,2,4-Trimethylbenzene	400	20 U	417	104	49-120	
1,2-Dibromo-3-Chloropropane	400	100 U	403	101	31-130	
1,2-Dichlorobenzene	400	20 U	410	103	65-120	
1,2-Dichloroethane	400	20 U	365	91	65-127	
1,2-Dichloropropane	400	20 U	423	106	73-125	
1,3-Dichlorobenzene	400	20 U	378	94	64-120	
1,3-Dichloropropane	400	20 U	450	112	65-125	
1,4-Dichlorobenzene	400	20 U	374	94	65-120	
2,2-Dichloropropane	400	20 U	437	109	42-137	
2-Chloroethyl vinyl ether	400	200 U	181 J	45	10-120	
2-Chlorotoluene	400	20 U	414	103	50-130	
2-Hexanone	800	100 U	932	116	44-142	
Bromobenzene	400	20 U	371	93	66-120	
Bromochloromethane	400	20 U	420	105	73-120	
4-Chlorotoluene	400	20 U	397	99	49-133	
p-Isopropyltoluene	400	20 U	384	96	39-133	
Acetone	800	100 U	1080	135	32-157	
Benzene	400	20 U	430	107	70-121	
Bromoform	400	20 U	363	91	41-128	
Bromomethane	400	20 U	385	96	41-136	
Carbon disulfide	400	20 U	396	99	54-131	
Carbon tetrachloride	400	20 U	351	88	53-142	
Chlorobenzene	400	20 U	411	103	73-120	
Chloroethane	400	20 U	436	109	37-142	
Chloroform	400	20 U	406	101	66-126	
Chloromethane	400	20 U	425	106	33-146	
cis-1,2-Dichloroethene	400	20 U	396	99	68-121	
cis-1,3-Dichloropropene	400	20 U	377	94	56-121	
Hexachlorobutadiene	400	20 U	260	65	17-120	
Dibromomethane	400	20 U	319	80	68-120	
Bromodichloromethane	400	20 U	367	92	69-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916401.d

Lab ID: 200-54623-C-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	400	20 U	352	88	27-132	
Ethylbenzene	400	20 U	407	102	66-122	
1,2-Dibromoethane	400	20 U	404	101	66-120	
Naphthalene	400	20 U	402	100	30-125	
m-Xylene & p-Xylene	400	40 U	417	104	65-123	
n-Butylbenzene	400	20 U	379	95	27-135	
Isopropylbenzene	400	20 U	412	103	56-122	
n-Propylbenzene	400	20 U	405	101	40-136	
2-Butanone	800	100 U	890	111	40-147	
4-Methyl-2-pentanone	800	100 U	866	108	40-147	
sec-Butylbenzene	400	20 U	392	98	32-139	
Methyl tert-butyl ether	400	20 U	375	94	50-126	
Methylene Chloride	400	100 U	414	104	59-127	
o-Xylene	400	20 U	430	108	63-124	
Styrene	400	20 U	418	104	57-126	
tert-Butylbenzene	400	20 U	369	92	36-133	
Tetrachloroethene	400	720	1080	90	52-129	
Toluene	400	20 U	439	110	68-124	
trans-1,2-Dichloroethene	400	20 U	412	103	69-126	
trans-1,3-Dichloropropene	400	20 U	390	98	53-120	
Trichloroethene	400	20 U	365	91	56-124	
Trichlorofluoromethane	400	20 U	351	88	45-152	
Vinyl acetate	400	40 U	435	109	28-165	
Vinyl chloride	400	10 U	438	110	49-136	
Xylenes, Total	800	40 U	847	106	64-124	
Dibromochloromethane	400	20 U	390	98	66-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279822a.D

Lab ID: 240-135021-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	130 U	2490	100	62-135	
1,1,2,2-Tetrachloroethane	2500	130 U	2720	109	37-149	
1,1-Dichloroethane	2500	130 U	2690	107	71-121	
1,1-Dichloroethene	2500	130 U	2710	108	64-132	
1,2-Dichlorobenzene	2500	130 U	2570	103	65-120	
1,2-Dichloroethane	2500	130 U	2310	92	65-127	
1,3-Dichlorobenzene	2500	130 U	2580	103	64-120	
1,4-Dichlorobenzene	2500	130 U	2500	100	65-120	
Acetone	5000	630 U	5600	112	32-157	
Benzene	2500	130 U	2440	98	70-121	
Carbon disulfide	2500	130 U	2700	108	54-131	
Chloroethane	2500	130 U	2470	99	37-142	
Chloroform	2500	130 U	2350	94	66-126	
cis-1,2-Dichloroethene	2500	2300	4410	84	68-121	
Ethylbenzene	2500	130 U	2680	107	66-122	
m-Xylene & p-Xylene	2500	250 U	2700	108	65-123	
Methylene Chloride	2500	630 U	2810	112	59-127	
o-Xylene	2500	130 U	2610	104	63-124	
Tetrachloroethene	2500	4300	6660	93	52-129	
Toluene	2500	130 U	2500	100	68-124	
trans-1,2-Dichloroethene	2500	130 U	2830	113	69-126	
Trichloroethene	2500	420	2910	99	56-124	
Vinyl chloride	2500	130	2950	113	49-136	
Xylenes, Total	5000	250 U	5310	106	64-124	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916402.d

Lab ID: 200-54623-C-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	405	101	1	35	67-120	
1,1,1-Trichloroethane	400	363	91	1	35	62-135	
1,1,2,2-Tetrachloroethane	400	485	121	1	35	37-149	
1,1,2-Trichlorotrifluoroethane (Freon 113)	400	389	97	4	35	41-145	
1,1-Dichloroethane	400	422	106	2	35	71-121	
1,1-Dichloroethene	400	381	95	3	35	64-132	
1,1-Dichloropropene	400	404	101	2	31	56-126	
1,2,3-Trichlorobenzene	400	359	90	3	24	32-122	
1,2,3-Trichloropropane	400	432	108	1	35	53-137	
1,2,4-Trichlorobenzene	400	322	80	4	25	37-120	
1,2,4-Trimethylbenzene	400	416	104	0	16	49-120	
1,2-Dibromo-3-Chloropropane	400	415	104	3	35	31-130	
1,2-Dichlorobenzene	400	410	103	0	35	65-120	
1,2-Dichloroethane	400	366	92	0	35	65-127	
1,2-Dichloropropane	400	430	107	2	35	73-125	
1,3-Dichlorobenzene	400	383	96	1	35	64-120	
1,3-Dichloropropane	400	443	111	2	10	65-125	
1,4-Dichlorobenzene	400	377	94	1	35	65-120	
2,2-Dichloropropane	400	444	111	1	28	42-137	
2-Chloroethyl vinyl ether	400	150 J	37	19	35	10-120	
2-Chlorotoluene	400	418	105	1	18	50-130	
2-Hexanone	800	957	120	3	35	44-142	
Bromobenzene	400	371	93	0	11	66-120	
Bromochloromethane	400	418	104	1	14	73-120	
4-Chlorotoluene	400	401	100	1	16	49-133	
p-Isopropyltoluene	400	385	96	0	22	39-133	
Acetone	800	1150	144	6	35	32-157	
Benzene	400	431	108	0	35	70-121	
Bromoform	400	351	88	3	35	41-128	
Bromomethane	400	380	95	1	35	41-136	
Carbon disulfide	400	388	97	2	35	54-131	
Carbon tetrachloride	400	354	88	1	35	53-142	
Chlorobenzene	400	404	101	2	35	73-120	
Chloroethane	400	424	106	3	35	37-142	
Chloroform	400	402	100	1	35	66-126	
Chloromethane	400	404	101	5	35	33-146	
cis-1,2-Dichloroethene	400	388	97	2	35	68-121	
cis-1,3-Dichloropropene	400	377	94	0	35	56-121	
Hexachlorobutadiene	400	271	68	4	35	17-120	
Dibromomethane	400	324	81	1	35	68-120	
Bromodichloromethane	400	370	92	1	35	69-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916402.d

Lab ID: 200-54623-C-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	400	329	82	7	35	27-132	
Ethylbenzene	400	410	102	1	35	66-122	
1,2-Dibromoethane	400	399	100	1	35	66-120	
Naphthalene	400	412	103	3	24	30-125	
m-Xylene & p-Xylene	400	417	104	0	35	65-123	
n-Butylbenzene	400	387	97	2	24	27-135	
Isopropylbenzene	400	410	103	0	20	56-122	
n-Propylbenzene	400	409	102	1	18	40-136	
2-Butanone	800	968	121	8	35	40-147	
4-Methyl-2-pentanone	800	883	110	2	35	40-147	
sec-Butylbenzene	400	395	99	1	24	32-139	
Methyl tert-butyl ether	400	395	99	5	17	50-126	
Methylene Chloride	400	411	103	1	32	59-127	
o-Xylene	400	429	107	0	35	63-124	
Styrene	400	418	105	0	35	57-126	
tert-Butylbenzene	400	369	92	0	23	36-133	
Tetrachloroethene	400	1060	84	2	35	52-129	
Toluene	400	431	108	2	35	68-124	
trans-1,2-Dichloroethene	400	409	102	1	35	69-126	
trans-1,3-Dichloropropene	400	386	96	1	35	53-120	
Trichloroethene	400	363	91	0	35	56-124	
Trichlorofluoromethane	400	331	83	6	35	45-152	
Vinyl acetate	400	438	109	1	35	28-165	
Vinyl chloride	400	419	105	4	35	49-136	
Xylenes, Total	800	846	106	0	35	64-124	
Dibromochloromethane	400	386	97	1	35	66-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279823a.D

Lab ID: 240-135021-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	2480	99	0	35	62-135	
1,1,2,2-Tetrachloroethane	2500	2660	106	2	35	37-149	
1,1-Dichloroethane	2500	2660	106	1	35	71-121	
1,1-Dichloroethene	2500	2720	109	0	35	64-132	
1,2-Dichlorobenzene	2500	2570	103	0	35	65-120	
1,2-Dichloroethane	2500	2310	92	0	35	65-127	
1,3-Dichlorobenzene	2500	2580	103	0	35	64-120	
1,4-Dichlorobenzene	2500	2490	100	0	35	65-120	
Acetone	5000	5840	117	4	35	32-157	
Benzene	2500	2460	98	1	35	70-121	
Carbon disulfide	2500	2700	108	0	35	54-131	
Chloroethane	2500	2450	98	1	35	37-142	
Chloroform	2500	2350	94	0	35	66-126	
cis-1,2-Dichloroethene	2500	4480	87	2	35	68-121	
Ethylbenzene	2500	2660	107	0	35	66-122	
m-Xylene & p-Xylene	2500	2720	109	1	35	65-123	
Methylene Chloride	2500	2790	112	1	32	59-127	
o-Xylene	2500	2620	105	0	35	63-124	
Tetrachloroethene	2500	6770	97	2	35	52-129	
Toluene	2500	2490	100	0	35	68-124	
trans-1,2-Dichloroethene	2500	2810	113	1	35	69-126	
Trichloroethene	2500	2970	102	2	35	56-124	
Vinyl chloride	2500	2890	111	2	35	49-136	
Xylenes, Total	5000	5340	107	1	35	64-124	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1916365.d Lab Sample ID: MB 240-447281/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/14/2020 19:36

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 240-447281/5	U1916362.d	08/14/2020 18:29
MSA-SW42D-081220	240-134931-20	U1916375.d	08/14/2020 23:20
MSA-SW43A-081220	240-134931-21	U1916376.d	08/14/2020 23:42
MSA-SW43B-081220	240-134931-22	U1916377.d	08/15/2020 00:04
MSA-SW43C-081220	240-134931-23	U1916378.d	08/15/2020 00:27
MSA-SW43D-081220	240-134931-24	U1916379.d	08/15/2020 00:49
MSA-SW44A-081220	240-134931-25	U1916380.d	08/15/2020 01:12
MSA-SW44B-081220	240-134931-26	U1916381.d	08/15/2020 01:34
MSA-SW44C-081220	240-134931-27	U1916382.d	08/15/2020 01:57
MSA-SW44D-081220	240-134931-28	U1916383.d	08/15/2020 02:19
TB-081220	240-134931-29	U1916384.d	08/15/2020 02:41

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1916395.d Lab Sample ID: MB 240-447506/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/17/2020 19:16

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 240-447506/5	U1916392.d	08/17/2020 18:09
	200-54623-C-4 MS	U1916401.d	08/17/2020 21:29
	200-54623-C-4 MSD	U1916402.d	08/17/2020 21:52
MSA-SW37A-081220	240-134931-1	U1916404.d	08/17/2020 22:37
MSA-SW37B-081220	240-134931-2	U1916405.d	08/17/2020 22:59
MSA-SW37C-081220	240-134931-3	U1916406.d	08/17/2020 23:22
MSA-SW37D-081220	240-134931-4	U1916407.d	08/17/2020 23:44
MSA-SW38A-081220	240-134931-5	U1916408.d	08/18/2020 00:06
MSA-SW38B-081220	240-134931-6	U1916409.d	08/18/2020 00:29
MSA-SW38C-081220	240-134931-7	U1916410.d	08/18/2020 00:51
MSA-SW38D-081220	240-134931-8	U1916411.d	08/18/2020 01:14
MSA-SW40A-081220	240-134931-9	U1916412.d	08/18/2020 01:36
MSA-SW40B-081220	240-134931-10	U1916413.d	08/18/2020 01:59
MSA-SW42B-081220	240-134931-18	U1916414.d	08/18/2020 02:21
MSA-SW42C-081220	240-134931-19	U1916415.d	08/18/2020 02:44
MSA-SW46A-081220	240-134931-30	U1916416.d	08/18/2020 03:06
MSA-SW47A-081220	240-134931-31	U1916417.d	08/18/2020 03:28
MSA-SW48A-081220	240-134931-32	U1916418.d	08/18/2020 03:51
MSA-SW49A-081220	240-134931-33	U1916419.d	08/18/2020 04:13

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1916425.d Lab Sample ID: MB 240-447698/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/18/2020 20:57

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 240-447698/5	U1916422.d	08/18/2020 19:50
MSA-SW37A-081220	240-134931-1	U1916426.d	08/18/2020 21:19
MSA-SW37B-081220	240-134931-2	U1916427.d	08/18/2020 21:42
MSA-SW37C-081220	240-134931-3	U1916428.d	08/18/2020 22:04
MSA-SW37D-081220	240-134931-4	U1916429.d	08/18/2020 22:27
MSA-SW38A-081220	240-134931-5	U1916430.d	08/18/2020 22:49
MSA-SW38B-081220	240-134931-6	U1916431.d	08/18/2020 23:12
MSA-SW38D-081220	240-134931-8	U1916432.d	08/18/2020 23:34
MSA-SW40A-081220	240-134931-9	U1916433.d	08/18/2020 23:56
MSA-SW40B-081220	240-134931-10	U1916434.d	08/19/2020 00:18
MSA-SW42B-081220	240-134931-18	U1916435.d	08/19/2020 00:41
MSA-SW42C-081220	240-134931-19	U1916436.d	08/19/2020 01:03
MSA-SW46A-081220	240-134931-30	U1916437.d	08/19/2020 01:26
MSA-SW47A-081220	240-134931-31	U1916438.d	08/19/2020 01:48
MSA-SW48A-081220	240-134931-32	U1916439.d	08/19/2020 02:10
MSA-SW49A-081220	240-134931-33	U1916440.d	08/19/2020 02:32
MSA-SW40C-081220	240-134931-11	U1916441.d	08/19/2020 02:55
MSA-SW40D-081220	240-134931-12	U1916442.d	08/19/2020 03:18
MSA-SW41A-081220	240-134931-13	U1916443.d	08/19/2020 03:40
MSA-SW41B-081220	240-134931-14	U1916444.d	08/19/2020 04:02
MSA-SW41C-081220	240-134931-15	U1916445.d	08/19/2020 04:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1279812.D Lab Sample ID: MB 240-447867/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX12 Date Analyzed: 08/19/2020 17:38

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 240-447867/5	U1279809.D	08/19/2020 16:31
	240-135021-B-1 MS	U1279822a.D	08/19/2020 21:22
	240-135021-B-1 MSD	U1279823a.D	08/19/2020 21:45
MSA-SW41D-081220	240-134931-16	U1279836.D	08/20/2020 02:37
MSA-SW42A-081220	240-134931-17	U1279837.D	08/20/2020 03:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: BFB4436a.D BFB Injection Date: 07/16/2020

Instrument ID: A3UX12 BFB Injection Time: 16:09

Analysis Batch No.: 442963

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	51.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	86.5	
175	5.0 - 9.0 % of mass 174	6.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	84.1	(97.2) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-442963/9	U1279113.D	07/16/2020	17:43
	STD8260 240-442963/10	U1279114.D	07/16/2020	18:05
	STD8260 240-442963/11	U1279115.D	07/16/2020	18:27
	STD8260 240-442963/12	U1279116.D	07/16/2020	18:50
	ICIS 240-442963/13	U1279117.D	07/16/2020	19:12
	STD8260 240-442963/14	U1279118.D	07/16/2020	19:35
	STD8260 240-442963/15	U1279119.D	07/16/2020	19:57
	STD8260 240-442963/16	U1279120.D	07/16/2020	20:20
	ICV 240-442963/17	U1279121.D	07/16/2020	20:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: BFB4462.D BFB Injection Date: 08/19/2020

Instrument ID: A3UX12 BFB Injection Time: 15:23

Analysis Batch No.: 447867

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.9	
75	30.0 - 60.0 % of mass 95	47.9	
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	Greater than 50% of mass 95	87.3	
175	5.0 - 9.0 % of mass 174	6.4	(7.3) 1
176	95.0 - 101.0 % of mass 174	85.5	(98.0) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-447867/3	U1279807.D	08/19/2020	15:46
	CCVIS 240-447867/4	U1279808.D	08/19/2020	16:09
	LCS 240-447867/5	U1279809.D	08/19/2020	16:31
	MB 240-447867/8	U1279812.D	08/19/2020	17:38
	240-135021-B-1 MS	U1279822a.D	08/19/2020	21:22
	240-135021-B-1 MSD	U1279823a.D	08/19/2020	21:45
MSA-SW41D-081220	240-134931-16	U1279836.D	08/20/2020	2:37
MSA-SW42A-081220	240-134931-17	U1279837.D	08/20/2020	3:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: bfb599.d BFB Injection Date: 08/14/2020

Instrument ID: A3UX19 BFB Injection Time: 17:20

Analysis Batch No.: 447281

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.7	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	85.2	
175	5.0 - 9.0 % of mass 174	7.2	(8.5) 1
176	95.0 - 101.0 % of mass 174	82.6	(97.0) 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
	CCV 240-447281/3	U1916360.d	08/14/2020	17:44
	CCVIS 240-447281/4	U1916361.d	08/14/2020	18:06
	LCS 240-447281/5	U1916362.d	08/14/2020	18:29
	MB 240-447281/8	U1916365.d	08/14/2020	19:36
MSA-SW42D-081220	240-134931-20	U1916375.d	08/14/2020	23:20
MSA-SW43A-081220	240-134931-21	U1916376.d	08/14/2020	23:42
MSA-SW43B-081220	240-134931-22	U1916377.d	08/15/2020	0:04
MSA-SW43C-081220	240-134931-23	U1916378.d	08/15/2020	0:27
MSA-SW43D-081220	240-134931-24	U1916379.d	08/15/2020	0:49
MSA-SW44A-081220	240-134931-25	U1916380.d	08/15/2020	1:12
MSA-SW44B-081220	240-134931-26	U1916381.d	08/15/2020	1:34
MSA-SW44C-081220	240-134931-27	U1916382.d	08/15/2020	1:57
MSA-SW44D-081220	240-134931-28	U1916383.d	08/15/2020	2:19
TB-081220	240-134931-29	U1916384.d	08/15/2020	2:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: bfb600.d BFB Injection Date: 08/17/2020

Instrument ID: A3UX19 BFB Injection Time: 17:02

Analysis Batch No.: 447506

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	47.8	
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	Greater than 50% of mass 95	85.2	
175	5.0 - 9.0 % of mass 174	7.3	(8.6) 1
176	95.0 - 101.0 % of mass 174	81.9	(96.1) 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
	CCV 240-447506/3	U1916390.d	08/17/2020	17:24
	CCVIS 240-447506/4	U1916391.d	08/17/2020	17:46
	LCS 240-447506/5	U1916392.d	08/17/2020	18:09
	MB 240-447506/8	U1916395.d	08/17/2020	19:16
	200-54623-C-4 MS	U1916401.d	08/17/2020	21:29
	200-54623-C-4 MSD	U1916402.d	08/17/2020	21:52
MSA-SW37A-081220	240-134931-1	U1916404.d	08/17/2020	22:37
MSA-SW37B-081220	240-134931-2	U1916405.d	08/17/2020	22:59
MSA-SW37C-081220	240-134931-3	U1916406.d	08/17/2020	23:22
MSA-SW37D-081220	240-134931-4	U1916407.d	08/17/2020	23:44
MSA-SW38A-081220	240-134931-5	U1916408.d	08/18/2020	0:06
MSA-SW38B-081220	240-134931-6	U1916409.d	08/18/2020	0:29
MSA-SW38C-081220	240-134931-7	U1916410.d	08/18/2020	0:51
MSA-SW38D-081220	240-134931-8	U1916411.d	08/18/2020	1:14
MSA-SW40A-081220	240-134931-9	U1916412.d	08/18/2020	1:36
MSA-SW40B-081220	240-134931-10	U1916413.d	08/18/2020	1:59
MSA-SW42B-081220	240-134931-18	U1916414.d	08/18/2020	2:21
MSA-SW42C-081220	240-134931-19	U1916415.d	08/18/2020	2:44
MSA-SW46A-081220	240-134931-30	U1916416.d	08/18/2020	3:06
MSA-SW47A-081220	240-134931-31	U1916417.d	08/18/2020	3:28
MSA-SW48A-081220	240-134931-32	U1916418.d	08/18/2020	3:51
MSA-SW49A-081220	240-134931-33	U1916419.d	08/18/2020	4:13

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: bfb601.d BFB Injection Date: 08/18/2020

Instrument ID: A3UX19 BFB Injection Time: 18:41

Analysis Batch No.: 447698

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	84.7	
175	5.0 - 9.0 % of mass 174	7.0	(8.3) 1
176	95.0 - 101.0 % of mass 174	81.4	(96.1) 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
	CCV 240-447698/3	U1916420.d	08/18/2020	19:05
	CCVIS 240-447698/4	U1916421.d	08/18/2020	19:27
	LCS 240-447698/5	U1916422.d	08/18/2020	19:50
	MB 240-447698/8	U1916425.d	08/18/2020	20:57
MSA-SW37A-081220	240-134931-1	U1916426.d	08/18/2020	21:19
MSA-SW37B-081220	240-134931-2	U1916427.d	08/18/2020	21:42
MSA-SW37C-081220	240-134931-3	U1916428.d	08/18/2020	22:04
MSA-SW37D-081220	240-134931-4	U1916429.d	08/18/2020	22:27
MSA-SW38A-081220	240-134931-5	U1916430.d	08/18/2020	22:49
MSA-SW38B-081220	240-134931-6	U1916431.d	08/18/2020	23:12
MSA-SW38D-081220	240-134931-8	U1916432.d	08/18/2020	23:34
MSA-SW40A-081220	240-134931-9	U1916433.d	08/18/2020	23:56
MSA-SW40B-081220	240-134931-10	U1916434.d	08/19/2020	0:18
MSA-SW42B-081220	240-134931-18	U1916435.d	08/19/2020	0:41
MSA-SW42C-081220	240-134931-19	U1916436.d	08/19/2020	1:03
MSA-SW46A-081220	240-134931-30	U1916437.d	08/19/2020	1:26
MSA-SW47A-081220	240-134931-31	U1916438.d	08/19/2020	1:48
MSA-SW48A-081220	240-134931-32	U1916439.d	08/19/2020	2:10
MSA-SW49A-081220	240-134931-33	U1916440.d	08/19/2020	2:32
MSA-SW40C-081220	240-134931-11	U1916441.d	08/19/2020	2:55
MSA-SW40D-081220	240-134931-12	U1916442.d	08/19/2020	3:18
MSA-SW41A-081220	240-134931-13	U1916443.d	08/19/2020	3:40
MSA-SW41B-081220	240-134931-14	U1916444.d	08/19/2020	4:02
MSA-SW41C-081220	240-134931-15	U1916445.d	08/19/2020	4:24

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: ICIS 240-442963/13 Date Analyzed: 07/16/2020 19:12

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1279117.D Heated Purge: (Y/N) N

Calibration ID: 57831

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		930091	5.10	747849	7.75	400649	9.97
UPPER LIMIT		1860182	5.60	1495698	8.25	801298	10.47
LOWER LIMIT		465046	4.60	373925	7.25	200325	9.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-442963/17		993337	5.10	838058	7.75	407737	9.97
CCVIS 240-447867/4		1010042	5.10	700125	7.75	361557	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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447867/4 Date Analyzed: 08/19/2020 16:09

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1279808.D Heated Purge: (Y/N) N

Calibration ID: 57831

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1010042	5.10	700125	7.75	361557	9.97
UPPER LIMIT		2020084	5.60	1400250	8.25	723114	10.47
LOWER LIMIT		505021	4.60	350063	7.25	180779	9.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447867/5		997670	5.10	699753	7.75	354239	9.97
MB 240-447867/8		1000312	5.10	688248	7.75	355736	9.97
240-135021-B-1 MS		941545	5.10	635001	7.75	323387	9.97
240-135021-B-1 MSD		949078	5.10	642472	7.75	333892	9.97
240-134931-16	MSA-SW41D-081220	932458	5.10	626218	7.75	323122	9.97
240-134931-17	MSA-SW42A-081220	952910	5.10	623276	7.76	330885	9.97

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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 240-447281/4		1022055	5.67	752909	8.50	402555	10.90
CCVIS 240-447506/4		967141	5.67	690161	8.50	372753	10.90
CCVIS 240-447698/4		954186	5.67	706054	8.50	382688	10.90

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447281/4 Date Analyzed: 08/14/2020 18:06

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1916361.d Heated Purge: (Y/N) N

Calibration ID: 57283

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1022055	5.67	752909	8.50	402555	10.90
UPPER LIMIT		2044110	6.17	1505818	9.00	805110	11.40
LOWER LIMIT		511028	5.17	376455	8.00	201278	10.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447281/5		1014792	5.67	743246	8.50	391665	10.90
MB 240-447281/8		958064	5.67	707631	8.50	352282	10.90
240-134931-20	MSA-SW42D-081220	933963	5.67	703049	8.50	350679	10.90
240-134931-21	MSA-SW43A-081220	925817	5.67	677265	8.50	342636	10.90
240-134931-22	MSA-SW43B-081220	934195	5.67	695083	8.50	352618	10.90
240-134931-23	MSA-SW43C-081220	920030	5.67	664768	8.50	343360	10.90
240-134931-24	MSA-SW43D-081220	912701	5.67	677859	8.50	338931	10.90
240-134931-25	MSA-SW44A-081220	927781	5.67	687470	8.50	344875	10.90
240-134931-26	MSA-SW44B-081220	903726	5.67	663614	8.50	330950	10.90
240-134931-27	MSA-SW44C-081220	905539	5.67	673435	8.50	336744	10.90
240-134931-28	MSA-SW44D-081220	909064	5.67	673033	8.50	338369	10.90
240-134931-29	TB-081220	906404	5.67	669847	8.50	335696	10.90

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447506/4 Date Analyzed: 08/17/2020 17:46

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1916391.d Heated Purge: (Y/N) N

Calibration ID: 57283

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		967141	5.67	690161	8.50	372753	10.90
UPPER LIMIT		1934282	6.17	1380322	9.00	745506	11.40
LOWER LIMIT		483571	5.17	345081	8.00	186377	10.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447506/5		999090	5.67	731543	8.50	400514	10.90
MB 240-447506/8		945687	5.67	683222	8.50	346340	10.90
200-54623-C-4 MS		974131	5.67	702529	8.51	383576	10.90
200-54623-C-4 MSD		992250	5.67	726145	8.50	395313	10.90
240-134931-1	MSA-SW37A-081220	936520	5.67	693217	8.50	345992	10.90
240-134931-2	MSA-SW37B-081220	928693	5.67	694943	8.50	350260	10.90
240-134931-3	MSA-SW37C-081220	904322	5.67	667640	8.50	337245	10.90
240-134931-4	MSA-SW37D-081220	923313	5.67	686951	8.50	342196	10.90
240-134931-5	MSA-SW38A-081220	910188	5.67	665339	8.50	327616	10.90
240-134931-6	MSA-SW38B-081220	913681	5.67	684880	8.50	338002	10.90
240-134931-7	MSA-SW38C-081220	888598	5.67	659768	8.50	331894	10.90
240-134931-8	MSA-SW38D-081220	904030	5.67	670180	8.50	337312	10.90
240-134931-9	MSA-SW40A-081220	905265	5.67	679888	8.50	343518	10.90
240-134931-10	MSA-SW40B-081220	901695	5.67	663538	8.50	337329	10.90
240-134931-18	MSA-SW42B-081220	901991	5.67	680306	8.50	338031	10.90
240-134931-19	MSA-SW42C-081220	896727	5.67	675389	8.50	342413	10.90
240-134931-30	MSA-SW46A-081220	883786	5.67	652781	8.50	320354	10.90
240-134931-31	MSA-SW47A-081220	880192	5.67	661616	8.50	329024	10.90
240-134931-32	MSA-SW48A-081220	892592	5.67	663509	8.50	335965	10.90
240-134931-33	MSA-SW49A-081220	864276	5.67	634213	8.50	315957	10.90

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447698/4 Date Analyzed: 08/18/2020 19:27

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1916421.d Heated Purge: (Y/N) N

Calibration ID: 57283

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		954186	5.67	706054	8.50	382688	10.90
UPPER LIMIT		1908372	6.17	1412108	9.00	765376	11.40
LOWER LIMIT		477093	5.17	353027	8.00	191344	10.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447698/5		977757	5.67	723764	8.50	393016	10.90
MB 240-447698/8		912538	5.67	657246	8.50	332725	10.90
240-134931-1	MSA-SW37A-081220	910478	5.67	680903	8.50	331876	10.90
240-134931-2	MSA-SW37B-081220	879393	5.67	636420	8.50	312110	10.90
240-134931-3	MSA-SW37C-081220	899895	5.67	671807	8.50	335308	10.90
240-134931-4	MSA-SW37D-081220	906114	5.67	676535	8.50	335707	10.90
240-134931-5	MSA-SW38A-081220	897663	5.67	658154	8.50	332914	10.90
240-134931-6	MSA-SW38B-081220	896010	5.67	668841	8.50	331560	10.90
240-134931-8	MSA-SW38D-081220	889995	5.67	659102	8.50	323793	10.90
240-134931-9	MSA-SW40A-081220	898504	5.67	667755	8.50	330744	10.90
240-134931-10	MSA-SW40B-081220	870199	5.67	640076	8.50	321111	10.90
240-134931-18	MSA-SW42B-081220	879575	5.67	649592	8.50	318342	10.90
240-134931-19	MSA-SW42C-081220	874876	5.67	632191	8.50	312526	10.90
240-134931-30	MSA-SW46A-081220	892915	5.67	669729	8.50	338552	10.90
240-134931-31	MSA-SW47A-081220	859457	5.67	636547	8.50	317151	10.90
240-134931-32	MSA-SW48A-081220	879171	5.67	664869	8.50	324656	10.90
240-134931-33	MSA-SW49A-081220	875258	5.67	633097	8.50	310423	10.90
240-134931-11	MSA-SW40C-081220	884983	5.67	657806	8.50	328137	10.90
240-134931-12	MSA-SW40D-081220	901237	5.67	680557	8.50	343999	10.90
240-134931-13	MSA-SW41A-081220	877451	5.67	650000	8.51	315627	10.90
240-134931-14	MSA-SW41B-081220	887179	5.67	664563	8.50	326648	10.90
240-134931-15	MSA-SW41C-081220	871203	5.67	663260	8.50	323077	10.90

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
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 VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
2-Methyl-2-propanol	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 (MEK)	0.0615 0.0642	0.0597 +++++	0.0632	0.0607	0.0645	Ave		0.0623			0.0100	3.2		20.0			
Chlorobromomethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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			
Dichlorobromomethane	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 (MIBK)	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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			
Chlorodibromomethane	0.3436 0.3509	0.3261 0.3352	0.3393	0.3492	0.3738	Ave		0.3454				4.4		20.0			
Ethylene Dibromide	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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			
4-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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
2-Methyl-2-propanol	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 (MEK)	FB	Ave	3739 482200	7212 +++++	78345	151425	322049	1.00 120	2.00 +++++	20.0	40.0	80.0
Chlorobromomethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
Dichlorobromomethane	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 (MIBK)	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
Chlorodibromomethane	CBNZ d5	Ave	7003 919717	13420 1130859	141322	298689	633936	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethylene Dibromide	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
4-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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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
2-Methyl-2-propanol	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 (MEK)	Ave	0.0623	0.0642	0.0100	0.0412	0.0400	3.1	50.0
Chlorobromomethane	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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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
Dichlorobromomethane	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 (MIBK)	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
Chlorodibromomethane	Ave	0.3454	0.3577		0.0207	0.0200	3.6	30.0
Ethylene Dibromide	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
4-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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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 VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: ICV 240-442963/17 Calibration Date: 07/16/2020 20:43

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279121.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	0.3124	0.3509	0.1000	0.0225	0.0200	12.3	30.0
Chloromethane	Ave	0.5311	0.5904	0.1000	0.0222	0.0200	11.2	30.0
Butadiene	Ave	0.3681	0.4281		0.0233	0.0200	16.3	30.0
Vinyl chloride	Ave	0.3743	0.4391	0.1000	0.0235	0.0200	17.3	30.0
Bromomethane	Ave	0.2481	0.2751	0.0500	0.0222	0.0200	10.9	30.0
Chloroethane	Ave	0.2724	0.3111	0.0500	0.0228	0.0200	14.2	30.0
Dichlorofluoromethane	Ave	0.5688	0.6178		0.0217	0.0200	8.6	30.0
Trichlorofluoromethane	Ave	0.4377	0.4814	0.1000	0.0220	0.0200	10.0	30.0
Ethyl ether	Ave	0.3037	0.3304		0.0218	0.0200	8.8	30.0
Acrolein	Ave	0.0262	0.0321		0.123	0.100	22.6	30.0
1,1-Dichloroethene	Ave	0.4021	0.4100	0.1000	0.0204	0.0200	2.0	30.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2362	0.2354	0.0500	0.0199	0.0200	-0.3	30.0
Acetone	Ave	0.1273	0.1438	0.0100	0.0452	0.0400	12.9	50.0
Iodomethane	Ave	0.4091	0.4420		0.0216	0.0200	8.0	30.0
Carbon disulfide	Ave	0.8097	0.8205	0.1000	0.0203	0.0200	1.3	30.0
3-Chloro-1-propene	Ave	0.4509	0.4651		0.0206	0.0200	3.1	30.0
Methyl acetate	Ave	0.3065	0.3473	0.1000	0.0453	0.0400	13.3	50.0
Methylene Chloride	Ave	0.3674	0.4042	0.1000	0.0220	0.0200	10.0	50.0
tert-Butyl alcohol	Ave	0.0380	0.0557		0.293	0.200	46.7*	30.0
Acrylonitrile	Ave	0.1589	0.1738		0.219	0.200	9.4	30.0
trans-1,2-Dichloroethene	Ave	0.3859	0.4140	0.1000	0.0215	0.0200	7.3	30.0
Methyl tert-butyl ether	Ave	0.8861	0.9183	0.1000	0.0207	0.0200	3.6	30.0
Hexane	Ave	0.4275	0.4675		0.0219	0.0200	9.4	30.0
1,1-Dichloroethane	Ave	0.5143	0.6173	0.2000	0.0240	0.0200	20.0	30.0
Vinyl acetate	Ave	0.7246	0.7980		0.0220	0.0200	10.1	30.0
2,2-Dichloropropane	Ave	0.3526	0.3801		0.0216	0.0200	7.8	30.0
cis-1,2-Dichloroethene	Ave	0.3599	0.3890	0.1000	0.0216	0.0200	8.1	30.0
2-Butanone	Ave	0.0631	0.0726	0.0100	0.0460	0.0400	15.0	50.0
Bromochloromethane	Ave	0.2926	0.3171		0.0217	0.0200	8.4	30.0
Tetrahydrofuran	Ave	0.1611	0.1994		0.0495	0.0400	23.8	30.0
Chloroform	Ave	0.5092	0.5736	0.2000	0.0225	0.0200	12.6	30.0
1,1,1-Trichloroethane	Ave	0.4037	0.4657	0.1000	0.0231	0.0200	15.3	30.0
Cyclohexane	Ave	0.4779	0.5352	0.1000	0.0224	0.0200	12.0	30.0
1,1-Dichloropropene	Ave	0.4108	0.4615		0.0225	0.0200	12.3	30.0
Carbon tetrachloride	Ave	0.3288	0.3656	0.1000	0.0222	0.0200	11.2	30.0
Isobutyl alcohol	Ave	0.0161	0.0230		0.714	0.500	42.7*	30.0
Benzene	Ave	1.228	1.390	0.5000	0.0226	0.0200	13.2	30.0
1,2-Dichloroethane	Ave	0.3989	0.4554	0.1000	0.0228	0.0200	14.2	30.0
n-Heptane	Lin1		0.2072		0.0187	0.0200	-6.5	30.0
Trichloroethene	Ave	0.2776	0.2927	0.1500	0.0211	0.0200	5.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: ICV 240-442963/17 Calibration Date: 07/16/2020 20:43

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279121.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	0.4860	0.4602	0.1000	0.0189	0.0200	-5.3	30.0
1,2-Dichloropropane	Ave	0.2651	0.2751	0.1000	0.0207	0.0200	3.7	30.0
Dibromomethane	Ave	0.1882	0.2021		0.0215	0.0200	7.4	30.0
1,4-Dioxane	Ave	0.0035	0.0039		0.454	0.400	13.5	50.0
Bromodichloromethane	Ave	0.3312	0.3543	0.1500	0.0214	0.0200	7.0	30.0
2-Chloroethyl vinyl ether	Ave	0.1997	0.2025		0.0203	0.0200	1.4	30.0
cis-1,3-Dichloropropene	Ave	0.4197	0.4401	0.1500	0.0210	0.0200	4.9	50.0
4-Methyl-2-pentanone	Ave	0.4341	0.4137	0.0500	0.0381	0.0400	-4.7	50.0
Toluene	Ave	1.659	1.351	0.4000	0.0163	0.0200	-18.6	30.0
trans-1,3-Dichloropropene	Ave	0.5377	0.4494	0.1000	0.0167	0.0200	-16.4	30.0
Ethyl methacrylate	Ave	0.5422	0.4760		0.0176	0.0200	-12.2	30.0
1,1,2-Trichloroethane	Ave	0.3249	0.2775	0.1000	0.0171	0.0200	-14.6	30.0
Tetrachloroethene	Ave	0.3971	0.3339	0.1500	0.0168	0.0200	-15.9	30.0
1,3-Dichloropropane	Ave	0.6096	0.5170		0.0170	0.0200	-15.2	30.0
2-Hexanone	Ave	0.4350	0.4478	0.0500	0.0412	0.0400	2.9	50.0
Dibromochloromethane	Ave	0.3194	0.3179		0.0199	0.0200	-0.5	30.0
1,2-Dibromoethane	Ave	0.3359	0.3434		0.0204	0.0200	2.2	30.0
Chlorobenzene	Ave	0.9701	0.998	0.3000	0.0206	0.0200	2.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3307	0.3372		0.0204	0.0200	2.0	30.0
Ethylbenzene	Ave	0.5327	0.5515		0.0207	0.0200	3.5	30.0
m-Xylene & p-Xylene	Ave	0.6598	0.6862		0.0208	0.0200	4.0	30.0
o-Xylene	Ave	0.6795	0.6513		0.0192	0.0200	-4.1	30.0
Styrene	Ave	1.091	1.089	0.3000	0.0200	0.0200	-0.2	30.0
Bromoform	Ave	0.2201	0.2169	0.1000	0.0197	0.0200	-1.5	30.0
Isopropylbenzene	Ave	1.703	1.642	0.1000	0.0193	0.0200	-3.6	30.0
1,1,2,2-Tetrachloroethane	Ave	1.000	1.064	0.3000	0.0213	0.0200	6.4	30.0
Bromobenzene	Ave	0.7816	0.8109		0.0207	0.0200	3.7	30.0
1,2,3-Trichloropropane	Ave	0.3449	0.3582		0.0208	0.0200	3.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2927	0.3519		0.0240	0.0200	20.2	30.0
n-Propylbenzene	Ave	0.8506	0.9062		0.0213	0.0200	6.5	30.0
2-Chlorotoluene	Ave	0.7510	0.7708		0.0205	0.0200	2.6	30.0
1,3,5-Trimethylbenzene	Ave	2.508	2.720		0.0217	0.0200	8.5	30.0
4-Chlorotoluene	Ave	0.7704	0.7927		0.0206	0.0200	2.9	30.0
tert-Butylbenzene	Ave	2.195	2.312		0.0211	0.0200	5.3	30.0
1,2,4-Trimethylbenzene	Ave	2.634	2.787		0.0212	0.0200	5.8	30.0
sec-Butylbenzene	Ave	3.184	3.288		0.0207	0.0200	3.3	30.0
1,3-Dichlorobenzene	Ave	1.484	1.505	0.6000	0.0203	0.0200	1.4	30.0
p-Isopropyltoluene	Ave	2.648	2.880		0.0218	0.0200	8.8	30.0
1,4-Dichlorobenzene	Ave	1.537	1.557	0.5000	0.0203	0.0200	1.3	30.0
n-Butylbenzene	Ave	2.220	2.439		0.0220	0.0200	9.8	30.0
1,2-Dichlorobenzene	Ave	1.473	1.461	0.4000	0.0198	0.0200	-0.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: ICV 240-442963/17 Calibration Date: 07/16/2020 20:43

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279121.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	0.2336	0.2648	0.0500	0.0227	0.0200	13.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8111	0.9289	0.2000	0.0229	0.0200	14.5	50.0
Hexachlorobutadiene	Ave	0.3104	0.3818		0.0246	0.0200	23.0	50.0
Naphthalene	Ave	2.686	3.079		0.0229	0.0200	14.6	50.0
1,2,3-Trichlorobenzene	Ave	0.7472	0.8510		0.0228	0.0200	13.9	30.0
Dibromofluoromethane (Surr)	Ave	0.2655	0.2811		0.0212	0.0200	5.9	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3249	0.3526		0.0217	0.0200	8.5	30.0
Toluene-d8 (Surr)	Ave	1.353	1.134		0.0168	0.0200	-16.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4632	0.4776		0.0206	0.0200	3.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447867/3 Calibration Date: 08/19/2020 15:46

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: U1279807.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		0.0669		0.214	0.200	7.2	20.0
Diisopropyl ether	Ave	0.2698	0.2626		0.0195	0.0200	-2.7	20.0
2-Chloro-1,3-butadiene	Ave	0.4548	0.5242		0.0231	0.0200	15.3	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8827	0.9421		0.0213	0.0200	6.7	20.0
Ethyl acetate	Ave	0.3663	0.4489		0.0490	0.0400	22.5*	20.0
Propionitrile	Lin1		0.0755		0.198	0.200	-0.9	20.0
Methacrylonitrile	Ave	0.2471	0.3044		0.246	0.200	23.2*	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.9065	0.9757		0.0215	0.0200	7.6	20.0
n-Butanol	Ave	0.0237	0.0205		0.432	0.500	-13.5	20.0
Ethyl acrylate	Ave	0.3838	0.4941		0.0258	0.0200	28.8*	20.0
Methyl methacrylate	Ave	0.2550	0.3480		0.0546	0.0400	36.5*	20.0
2-Nitropropane	Ave	0.0769	0.1082		0.0563	0.0400	40.7*	20.0
n-Butyl acetate	Ave	0.7023	0.9193		0.0262	0.0200	30.9*	20.0
1-Chlorohexane	Ave	0.5721	0.6268		0.0219	0.0200	9.6	20.0
Cyclohexanone	Lin1		0.0248		0.178	0.200	-10.9	20.0
Pentachloroethane	Ave	0.4435	0.4128		0.0372	0.0400	-6.9	20.0
1,2,3-Trimethylbenzene	Ave	2.954	2.893		0.0196	0.0200	-2.1	20.0
Benzyl chloride	Ave	2.132	2.219		0.0208	0.0200	4.1	20.0
1,3,5-Trichlorobenzene	Ave	1.258	1.044		0.0166	0.0200	-17.1	20.0
2-Methylnaphthalene	Ave	2.484	1.476		0.0238	0.0400	-40.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447867/4 Calibration Date: 08/19/2020 16:09

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279808.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	0.3124	0.3745	0.1000	0.0240	0.0200	19.9	20.0
Chloromethane	Ave	0.5311	0.5683	0.1000	0.0214	0.0200	7.0	20.0
Butadiene	Ave	0.3681	0.4435		0.0241	0.0200	20.5*	20.0
Vinyl chloride	Ave	0.3743	0.3924	0.1000	0.0210	0.0200	4.8	20.0
Bromomethane	Ave	0.2481	0.2177	0.0500	0.0175	0.0200	-12.3	20.0
Chloroethane	Ave	0.2724	0.2503	0.0500	0.0184	0.0200	-8.1	20.0
Dichlorofluoromethane	Ave	0.5688	0.4894		0.0172	0.0200	-14.0	20.0
Trichlorofluoromethane	Ave	0.4377	0.4048	0.1000	0.0185	0.0200	-7.5	20.0
Ethyl ether	Ave	0.3037	0.2692		0.0177	0.0200	-11.4	20.0
Acrolein	Ave	0.0262	0.0314		0.120	0.100	20.1*	20.0
1,1-Dichloroethene	Ave	0.4021	0.4201	0.1000	0.0209	0.0200	4.5	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2362	0.2484	0.0500	0.0210	0.0200	5.2	20.0
Acetone	Ave	0.1273	0.1443	0.0100	0.0453	0.0400	13.3	50.0
Iodomethane	Ave	0.4091	0.3831		0.0187	0.0200	-6.3	20.0
Carbon disulfide	Ave	0.8097	0.8605	0.1000	0.0213	0.0200	6.3	20.0
3-Chloro-1-propene	Ave	0.4509	0.5139		0.0228	0.0200	14.0	20.0
Methyl acetate	Ave	0.3065	0.3774	0.1000	0.0492	0.0400	23.1	50.0
Methylene Chloride	Ave	0.3674	0.3889	0.1000	0.0212	0.0200	5.8	50.0
tert-Butyl alcohol	Ave	0.0380	0.0515		0.271	0.200	35.7*	20.0
Acrylonitrile	Ave	0.1589	0.1733		0.218	0.200	9.1	20.0
Methyl tert-butyl ether	Ave	0.8861	0.8653	0.1000	0.0195	0.0200	-2.3	20.0
trans-1,2-Dichloroethene	Ave	0.3859	0.4146	0.1000	0.0215	0.0200	7.4	20.0
Hexane	Ave	0.4275	0.4892		0.0229	0.0200	14.4	20.0
1,1-Dichloroethane	Ave	0.5143	0.5240	0.2000	0.0204	0.0200	1.9	20.0
Vinyl acetate	Ave	0.7246	0.6810		0.0188	0.0200	-6.0	20.0
2,2-Dichloropropane	Ave	0.3526	0.3312		0.0188	0.0200	-6.1	20.0
cis-1,2-Dichloroethene	Ave	0.3599	0.3045	0.1000	0.0169	0.0200	-15.4	20.0
2-Butanone	Ave	0.0631	0.0630	0.0100	0.0399	0.0400	-0.2	50.0
Bromochloromethane	Ave	0.2926	0.2662		0.0182	0.0200	-9.0	20.0
Tetrahydrofuran	Ave	0.1611	0.2961		0.0735	0.0400	83.8*	20.0
Chloroform	Ave	0.5092	0.4560	0.2000	0.0179	0.0200	-10.5	20.0
1,1,1-Trichloroethane	Ave	0.4037	0.3923	0.1000	0.0194	0.0200	-2.8	20.0
Cyclohexane	Ave	0.4779	0.4873	0.1000	0.0204	0.0200	2.0	20.0
1,1-Dichloropropene	Ave	0.4108	0.4159		0.0202	0.0200	1.2	20.0
Carbon tetrachloride	Ave	0.3288	0.3222	0.1000	0.0196	0.0200	-2.0	20.0
Isobutyl alcohol	Ave	0.0161	0.0206		0.637	0.500	27.5*	20.0
Benzene	Ave	1.228	1.196	0.5000	0.0195	0.0200	-2.6	20.0
1,2-Dichloroethane	Ave	0.3989	0.3625	0.1000	0.0182	0.0200	-9.1	20.0
n-Heptane	Lin1		0.2343		0.0216	0.0200	7.9	20.0
Trichloroethene	Ave	0.2776	0.2789	0.1500	0.0201	0.0200	0.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447867/4 Calibration Date: 08/19/2020 16:09

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279808.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	0.4860	0.5280	0.1000	0.0217	0.0200	8.6	20.0
1,2-Dichloropropane	Ave	0.2651	0.2800	0.1000	0.0211	0.0200	5.6	20.0
Dibromomethane	Ave	0.1882	0.1742		0.0185	0.0200	-7.4	20.0
1,4-Dioxane	Ave	0.0035	0.0043		0.494	0.400	23.6	50.0
Bromodichloromethane	Ave	0.3312	0.3260	0.1500	0.0197	0.0200	-1.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1997	0.2186		0.0438	0.0400	9.4	20.0
cis-1,3-Dichloropropene	Ave	0.4197	0.4412	0.1500	0.0210	0.0200	5.1	50.0
4-Methyl-2-pentanone	Ave	0.4341	0.4641	0.0500	0.0428	0.0400	6.9	50.0
Toluene	Ave	1.659	1.664	0.4000	0.0201	0.0200	0.3	20.0
trans-1,3-Dichloropropene	Ave	0.5377	0.5660	0.1000	0.0211	0.0200	5.3	20.0
Ethyl methacrylate	Ave	0.5422	0.6025		0.0222	0.0200	11.1	20.0
1,1,2-Trichloroethane	Ave	0.3249	0.3193	0.1000	0.0197	0.0200	-1.7	20.0
Tetrachloroethene	Ave	0.3971	0.4036	0.1500	0.0203	0.0200	1.6	20.0
1,3-Dichloropropane	Ave	0.6096	0.6241		0.0205	0.0200	2.4	20.0
2-Hexanone	Ave	0.4350	0.4983	0.0500	0.0458	0.0400	14.5	50.0
Dibromochloromethane	Ave	0.3194	0.3187		0.0200	0.0200	-0.2	20.0
1,2-Dibromoethane	Ave	0.3359	0.3386		0.0202	0.0200	0.8	20.0
Chlorobenzene	Ave	0.9701	0.995	0.3000	0.0205	0.0200	2.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3307	0.3364		0.0203	0.0200	1.7	20.0
Ethylbenzene	Ave	0.5327	0.5737		0.0215	0.0200	7.7	20.0
m-Xylene & p-Xylene	Ave	0.6598	0.7123		0.0216	0.0200	8.0	20.0
o-Xylene	Ave	0.6795	0.6999		0.0206	0.0200	3.0	20.0
Styrene	Ave	1.091	1.162	0.3000	0.0213	0.0200	6.6	20.0
Bromoform	Ave	0.2201	0.2308	0.1000	0.0210	0.0200	4.8	20.0
Isopropylbenzene	Ave	1.703	1.831	0.1000	0.0215	0.0200	7.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.000	1.045	0.3000	0.0209	0.0200	4.5	20.0
Bromobenzene	Ave	0.7816	0.7955		0.0204	0.0200	1.8	20.0
1,2,3-Trichloropropane	Ave	0.3449	0.3582		0.0208	0.0200	3.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2927	0.2690		0.0184	0.0200	-8.1	20.0
n-Propylbenzene	Ave	0.8506	0.9452		0.0222	0.0200	11.1	20.0
2-Chlorotoluene	Ave	0.7510	0.7791		0.0207	0.0200	3.7	20.0
1,3,5-Trimethylbenzene	Ave	2.508	2.760		0.0220	0.0200	10.0	20.0
4-Chlorotoluene	Ave	0.7704	0.8001		0.0208	0.0200	3.8	20.0
tert-Butylbenzene	Ave	2.195	2.416		0.0220	0.0200	10.1	20.0
1,2,4-Trimethylbenzene	Ave	2.634	2.764		0.0210	0.0200	4.9	20.0
sec-Butylbenzene	Ave	3.184	3.437		0.0216	0.0200	7.9	20.0
1,3-Dichlorobenzene	Ave	1.484	1.494	0.6000	0.0201	0.0200	0.7	20.0
p-Isopropyltoluene	Ave	2.648	2.927		0.0221	0.0200	10.5	20.0
1,4-Dichlorobenzene	Ave	1.537	1.522	0.5000	0.0198	0.0200	-0.9	20.0
n-Butylbenzene	Ave	2.220	2.490		0.0224	0.0200	12.2	20.0
1,2-Dichlorobenzene	Ave	1.473	1.477	0.4000	0.0201	0.0200	0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447867/4 Calibration Date: 08/19/2020 16:09

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279808.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	0.2336	0.2752	0.0500	0.0236	0.0200	17.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8111	0.9128	0.2000	0.0225	0.0200	12.5	50.0
Hexachlorobutadiene	Ave	0.3104	0.3300		0.0213	0.0200	6.3	50.0
Naphthalene	Ave	2.686	3.133		0.0233	0.0200	16.6	50.0
1,2,3-Trichlorobenzene	Ave	0.7472	0.8583		0.0230	0.0200	14.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2655	0.2354		0.0177	0.0200	-11.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3249	0.2955		0.0182	0.0200	-9.1	20.0
Toluene-d8 (Surr)	Ave	1.353	1.383		0.0204	0.0200	2.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4632	0.5096		0.0220	0.0200	10.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	30.0
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 VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	30.0
1,1-Dichloroethene	Ave	0.3589	0.3889	0.1000	0.0217	0.0200	8.3	30.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	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	50.0
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	30.0
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	30.0
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	50.0
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3230	0.0500	0.0403	0.0400	0.8	50.0
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	50.0
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	50.0
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 VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447281/3 Calibration Date: 08/14/2020 17:44

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: U1916360.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		0.0426		0.213	0.200	6.6	20.0
Diisopropyl ether	Ave	0.2313	0.2103		0.0182	0.0200	-9.1	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.3946		0.0198	0.0200	-0.8	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6430		0.0177	0.0200	-11.4	20.0
Ethyl acetate	Ave	0.3007	0.3152		0.0419	0.0400	4.8	20.0
Propionitrile	Ave	0.0408	0.0560		0.275	0.200	37.4*	20.0
Methacrylonitrile	Ave	0.1828	0.1973		0.216	0.200	7.9	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.6807		0.0177	0.0200	-11.6	20.0
n-Butanol	Ave	0.0094	0.0141		0.754	0.500	50.7*	20.0
Ethyl acrylate	Ave	0.3703	0.3759		0.0203	0.0200	1.5	20.0
Methyl methacrylate	Ave	0.2459	0.2386		0.0388	0.0400	-3.0	20.0
2-Nitropropane	Ave	0.0726	0.0849		0.0468	0.0400	17.0	20.0
n-Butyl acetate	Ave	0.5364	0.5513		0.0206	0.0200	2.8	20.0
1-Chlorohexane	Ave	0.4610	0.4488		0.0195	0.0200	-2.6	20.0
Cyclohexanone	Ave	0.0137	0.0171		0.249	0.200	24.7*	20.0
Pentachloroethane	Ave	0.3462	0.4016		0.0464	0.0400	16.0	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.347		0.0206	0.0200	3.1	20.0
Benzyl chloride	Ave	1.286	1.676		0.0261	0.0200	30.3*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8644		0.0169	0.0200	-15.4	20.0
2-Methylnaphthalene	Ave	1.433	1.187		0.0331	0.0400	-17.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447281/4 Calibration Date: 08/14/2020 18:06

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: U1916361.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	0.3135	0.1000	0.0163	0.0200	-18.6	20.0
Chloromethane	Ave	0.2883	0.2877	0.1000	0.0200	0.0200	-0.2	20.0
Vinyl chloride	Ave	0.2980	0.3024	0.1000	0.0203	0.0200	1.5	20.0
Butadiene	Ave	0.2887	0.2846		0.0197	0.0200	-1.4	20.0
Bromomethane	Ave	0.2335	0.2074	0.0500	0.0178	0.0200	-11.2	20.0
Chloroethane	Ave	0.1848	0.1906	0.0500	0.0206	0.0200	3.1	20.0
Dichlorofluoromethane	Ave	0.4581	0.4300		0.0188	0.0200	-6.1	20.0
Trichlorofluoromethane	Ave	0.4984	0.4033	0.1000	0.0162	0.0200	-19.1	20.0
Ethyl ether	Ave	0.1800	0.2018		0.0224	0.0200	12.1	20.0
Acrolein	Ave	0.0445	0.0244		0.0549	0.100	-45.1*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3480	0.1000	0.0194	0.0200	-3.1	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2567	0.2616	0.0500	0.0204	0.0200	1.9	20.0
Acetone	Ave	0.0784	0.1004	0.0100	0.0512	0.0400	28.1	50.0
Iodomethane	Ave	0.4655	0.4055		0.0174	0.0200	-12.9	20.0
Carbon disulfide	Ave	0.7515	0.7289	0.1000	0.0194	0.0200	-3.0	20.0
3-Chloro-1-propene	Ave	0.3541	0.3358		0.0190	0.0200	-5.2	20.0
Methyl acetate	Ave	0.2328	0.2608	0.1000	0.0448	0.0400	12.0	50.0
Methylene Chloride	Ave	0.2846	0.2912	0.1000	0.0205	0.0200	2.3	50.0
tert-Butyl alcohol	Ave	0.0271	0.0356		0.263	0.200	31.3*	20.0
Acrylonitrile	Ave	0.1006	0.1264		0.251	0.200	25.7*	20.0
Methyl tert-butyl ether	Ave	0.6938	0.6837	0.1000	0.0197	0.0200	-1.5	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3392	0.1000	0.0200	0.0200	0.2	20.0
Hexane	Ave	0.3524	0.3673		0.0208	0.0200	4.2	20.0
1,1-Dichloroethane	Ave	0.4048	0.4222	0.2000	0.0209	0.0200	4.3	20.0
Vinyl acetate	Ave	0.4639	0.5017		0.0216	0.0200	8.2	20.0
2,2-Dichloropropane	Ave	0.2438	0.2689		0.0221	0.0200	10.3	20.0
2-Butanone	Ave	0.0472	0.0507	0.0100	0.0429	0.0400	7.3	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2797	0.1000	0.0194	0.0200	-3.2	20.0
Bromochloromethane	Ave	0.1945	0.1974		0.0203	0.0200	1.5	20.0
Tetrahydrofuran	Lin1		0.1160		0.0450	0.0400	12.6	20.0
Chloroform	Ave	0.4433	0.4440	0.2000	0.0200	0.0200	0.2	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3805	0.1000	0.0182	0.0200	-8.8	20.0
Cyclohexane	Ave	0.3819	0.3965	0.1000	0.0208	0.0200	3.8	20.0
1,1-Dichloropropene	Ave	0.3519	0.3613		0.0205	0.0200	2.7	20.0
Carbon tetrachloride	Ave	0.4023	0.3531	0.1000	0.0176	0.0200	-12.2	20.0
Isobutyl alcohol	Ave	0.0110	0.0134		0.610	0.500	22.0*	20.0
Benzene	Ave	0.9518	1.002	0.5000	0.0211	0.0200	5.3	20.0
1,2-Dichloroethane	Ave	0.3600	0.3277	0.1000	0.0182	0.0200	-9.0	20.0
n-Heptane	Lin1		0.1815		0.0160	0.0200	-19.8	20.0
Trichloroethene	Ave	0.3160	0.2860	0.1500	0.0181	0.0200	-9.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447281/4 Calibration Date: 08/14/2020 18:06

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: U1916361.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	0.4301	0.1000	0.0187	0.0200	-6.3	20.0
1,2-Dichloropropane	Ave	0.2208	0.2347	0.1000	0.0213	0.0200	6.3	20.0
1,4-Dioxane	Ave	0.0024	0.0042		0.701	0.400	75.3*	50.0
Dibromomethane	Ave	0.2271	0.1806		0.0159	0.0200	-20.4*	20.0
Bromodichloromethane	Ave	0.3479	0.3163	0.1500	0.0182	0.0200	-9.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1745		0.0394	0.0400	-1.4	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3784	0.1500	0.0196	0.0200	-2.1	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3283	0.0500	0.0410	0.0400	2.5	50.0
Toluene	Ave	1.352	1.454	0.4000	0.0215	0.0200	7.6	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4716	0.1000	0.0196	0.0200	-2.1	20.0
Ethyl methacrylate	Ave	0.4344	0.4589		0.0211	0.0200	5.6	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3021	0.1000	0.0213	0.0200	6.3	20.0
1,3-Dichloropropane	Ave	0.4802	0.5227		0.0218	0.0200	8.8	20.0
Tetrachloroethene	Ave	0.4313	0.3951	0.1500	0.0183	0.0200	-8.4	20.0
2-Hexanone	Ave	0.3149	0.3426	0.0500	0.0435	0.0400	8.8	50.0
Dibromochloromethane	Ave	0.3583	0.3432		0.0192	0.0200	-4.2	20.0
1,2-Dibromoethane	Ave	0.3346	0.3286		0.0196	0.0200	-1.8	20.0
Chlorobenzene	Ave	0.9253	0.9305	0.3000	0.0201	0.0200	0.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3360		0.0201	0.0200	0.7	20.0
Ethylbenzene	Ave	0.4836	0.4883		0.0202	0.0200	1.0	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6102		0.0207	0.0200	3.6	20.0
o-Xylene	Ave	0.5597	0.5945		0.0212	0.0200	6.2	20.0
Styrene	Ave	0.9588	0.9903	0.3000	0.0207	0.0200	3.3	20.0
Bromoform	Ave	0.2933	0.2561	0.1000	0.0175	0.0200	-12.7	20.0
Isopropylbenzene	Ave	1.503	1.537	0.1000	0.0205	0.0200	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9247	0.3000	0.0240	0.0200	20.0	20.0
Bromobenzene	Ave	0.7690	0.7328		0.0191	0.0200	-4.7	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3065		0.0210	0.0200	4.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2658		0.0194	0.0200	-2.9	20.0
n-Propylbenzene	Ave	0.7729	0.8074		0.0209	0.0200	4.5	20.0
2-Chlorotoluene	Ave	0.6541	0.6909		0.0211	0.0200	5.6	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.331		0.0210	0.0200	4.8	20.0
4-Chlorotoluene	Ave	0.7072	0.7190		0.0203	0.0200	1.7	20.0
tert-Butylbenzene	Ave	2.113	2.013		0.0191	0.0200	-4.7	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.355		0.0209	0.0200	4.4	20.0
sec-Butylbenzene	Ave	2.845	2.898		0.0204	0.0200	1.9	20.0
1,3-Dichlorobenzene	Ave	1.412	1.360	0.6000	0.0193	0.0200	-3.7	20.0
p-Isopropyltoluene	Ave	2.492	2.459		0.0197	0.0200	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.459	1.367	0.5000	0.0187	0.0200	-6.3	20.0
n-Butylbenzene	Ave	2.050	2.039		0.0199	0.0200	-0.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.327	0.4000	0.0207	0.0200	3.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447281/4 Calibration Date: 08/14/2020 18:06

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: U1916361.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	0.2555	0.0500	0.0208	0.0200	4.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.6871	0.2000	0.0161	0.0200	-19.6	50.0
Hexachlorobutadiene	Ave	0.4392	0.2895		0.0132	0.0200	-34.1	50.0
Naphthalene	Ave	2.363	2.421		0.0205	0.0200	2.4	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.6832		0.0178	0.0200	-11.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2633		0.0196	0.0200	-2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.2996		0.0194	0.0200	-3.1	20.0
Toluene-d8 (Surr)	Ave	1.199	1.298		0.0216	0.0200	8.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4698		0.0208	0.0200	4.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447506/3 Calibration Date: 08/17/2020 17:24

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: U1916390.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		0.0523		0.261	0.200	30.4*	20.0
Diisopropyl ether	Ave	0.2313	0.2112		0.0183	0.0200	-8.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.3958		0.0199	0.0200	-0.5	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6646		0.0183	0.0200	-8.4	20.0
Ethyl acetate	Ave	0.3007	0.3320		0.0442	0.0400	10.4	20.0
Propionitrile	Ave	0.0408	0.0616		0.302	0.200	51.1*	20.0
Methacrylonitrile	Ave	0.1828	0.2105		0.230	0.200	15.1	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.7067		0.0184	0.0200	-8.2	20.0
n-Butanol	Ave	0.0094	0.0156		0.835	0.500	67.1*	20.0
Ethyl acrylate	Ave	0.3703	0.3818		0.0206	0.0200	3.1	20.0
Methyl methacrylate	Ave	0.2459	0.2413		0.0393	0.0400	-1.9	20.0
2-Nitropropane	Ave	0.0726	0.0928		0.0512	0.0400	27.9*	20.0
n-Butyl acetate	Ave	0.5364	0.5706		0.0213	0.0200	6.4	20.0
1-Chlorohexane	Ave	0.4610	0.4572		0.0198	0.0200	-0.8	20.0
Cyclohexanone	Ave	0.0137	0.0191		0.280	0.200	40.0*	20.0
Pentachloroethane	Ave	0.3462	0.4358		0.0504	0.0400	25.9*	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.368		0.0208	0.0200	4.0	20.0
Benzyl chloride	Ave	1.286	1.759		0.0274	0.0200	36.8*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8512		0.0167	0.0200	-16.7	20.0
2-Methylnaphthalene	Ave	1.433	1.176		0.0328	0.0400	-17.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447506/4 Calibration Date: 08/17/2020 17:46

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: U1916391.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	0.3793	0.1000	0.0197	0.0200	-1.5	20.0
Chloromethane	Ave	0.2883	0.3118	0.1000	0.0216	0.0200	8.1	20.0
Butadiene	Ave	0.2887	0.3188		0.0221	0.0200	10.4	20.0
Vinyl chloride	Ave	0.2980	0.3377	0.1000	0.0227	0.0200	13.3	20.0
Bromomethane	Ave	0.2335	0.2294	0.0500	0.0197	0.0200	-1.7	20.0
Chloroethane	Ave	0.1848	0.2072	0.0500	0.0224	0.0200	12.1	20.0
Dichlorofluoromethane	Ave	0.4581	0.4552		0.0199	0.0200	-0.6	20.0
Trichlorofluoromethane	Ave	0.4984	0.4371	0.1000	0.0175	0.0200	-12.3	20.0
Ethyl ether	Ave	0.1800	0.2142		0.0238	0.0200	19.0	20.0
Acrolein	Ave	0.0445	0.0259		0.0583	0.100	-41.7*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3654	0.1000	0.0204	0.0200	1.8	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2567	0.2715	0.0500	0.0212	0.0200	5.8	20.0
Acetone	Ave	0.0784	0.1184	0.0100	0.0604	0.0400	51.0*	50.0
Iodomethane	Ave	0.4655	0.4223		0.0181	0.0200	-9.3	20.0
Carbon disulfide	Ave	0.7515	0.7814	0.1000	0.0208	0.0200	4.0	20.0
3-Chloro-1-propene	Ave	0.3541	0.3532		0.0199	0.0200	-0.3	20.0
Methyl acetate	Ave	0.2328	0.2806	0.1000	0.0482	0.0400	20.6	50.0
Methylene Chloride	Ave	0.2846	0.3013	0.1000	0.0212	0.0200	5.8	50.0
tert-Butyl alcohol	Ave	0.0271	0.0483		0.357	0.200	78.4*	20.0
Acrylonitrile	Ave	0.1006	0.1420		0.282	0.200	41.2*	20.0
Methyl tert-butyl ether	Ave	0.6938	0.7164	0.1000	0.0207	0.0200	3.3	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3607	0.1000	0.0213	0.0200	6.5	20.0
Hexane	Ave	0.3524	0.3685		0.0209	0.0200	4.6	20.0
1,1-Dichloroethane	Ave	0.4048	0.4439	0.2000	0.0219	0.0200	9.7	20.0
Vinyl acetate	Ave	0.4639	0.5067		0.0218	0.0200	9.2	20.0
2-Butanone	Ave	0.0472	0.0554	0.0100	0.0469	0.0400	17.3	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2907	0.1000	0.0201	0.0200	0.6	20.0
2,2-Dichloropropane	Ave	0.2438	0.2989		0.0245	0.0200	22.6*	20.0
Bromochloromethane	Ave	0.1945	0.2074		0.0213	0.0200	6.6	20.0
Tetrahydrofuran	Lin1		0.1446		0.0567	0.0400	41.9*	20.0
Chloroform	Ave	0.4433	0.4599	0.2000	0.0207	0.0200	3.7	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3973	0.1000	0.0190	0.0200	-4.8	20.0
Cyclohexane	Ave	0.3819	0.4206	0.1000	0.0220	0.0200	10.1	20.0
1,1-Dichloropropene	Ave	0.3519	0.3760		0.0214	0.0200	6.8	20.0
Carbon tetrachloride	Ave	0.4023	0.3669	0.1000	0.0182	0.0200	-8.8	20.0
Isobutyl alcohol	Ave	0.0110	0.0172		0.782	0.500	56.5*	20.0
Benzene	Ave	0.9518	1.056	0.5000	0.0222	0.0200	11.0	20.0
1,2-Dichloroethane	Ave	0.3600	0.3387	0.1000	0.0188	0.0200	-5.9	20.0
n-Heptane	Lin1		0.1820		0.0161	0.0200	-19.5	20.0
Trichloroethene	Ave	0.3160	0.2998	0.1500	0.0190	0.0200	-5.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447506/4 Calibration Date: 08/17/2020 17:46

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: U1916391.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	0.4512	0.1000	0.0197	0.0200	-1.7	20.0
1,2-Dichloropropane	Ave	0.2208	0.2417	0.1000	0.0219	0.0200	9.5	20.0
1,4-Dioxane	Ave	0.0024	0.0050		0.843	0.400	110.8*	50.0
Dibromomethane	Ave	0.2271	0.1876		0.0165	0.0200	-17.4	20.0
Bromodichloromethane	Ave	0.3479	0.3308	0.1500	0.0190	0.0200	-4.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1731		0.0391	0.0400	-2.2	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3855	0.1500	0.0200	0.0200	-0.2	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3475	0.0500	0.0434	0.0400	8.5	50.0
Toluene	Ave	1.352	1.540	0.4000	0.0228	0.0200	13.9	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4842	0.1000	0.0201	0.0200	0.5	20.0
Ethyl methacrylate	Ave	0.4344	0.4673		0.0215	0.0200	7.6	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3199	0.1000	0.0225	0.0200	12.6	20.0
1,3-Dichloropropane	Ave	0.4802	0.5450		0.0227	0.0200	13.5	20.0
Tetrachloroethene	Ave	0.4313	0.4170	0.1500	0.0193	0.0200	-3.3	20.0
2-Hexanone	Ave	0.3149	0.3635	0.0500	0.0462	0.0400	15.4	50.0
Dibromochloromethane	Ave	0.3583	0.3681		0.0205	0.0200	2.7	20.0
1,2-Dibromoethane	Ave	0.3346	0.3422		0.0205	0.0200	2.3	20.0
Chlorobenzene	Ave	0.9253	0.9692	0.3000	0.0209	0.0200	4.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3600		0.0216	0.0200	7.9	20.0
Ethylbenzene	Ave	0.4836	0.5172		0.0214	0.0200	6.9	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6470		0.0220	0.0200	9.8	20.0
o-Xylene	Ave	0.5597	0.6228		0.0223	0.0200	11.3	20.0
Styrene	Ave	0.9588	1.043	0.3000	0.0218	0.0200	8.8	20.0
Bromoform	Ave	0.2933	0.2732	0.1000	0.0186	0.0200	-6.8	20.0
Isopropylbenzene	Ave	1.503	1.640	0.1000	0.0218	0.0200	9.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9721	0.3000	0.0252	0.0200	26.1*	20.0
Bromobenzene	Ave	0.7690	0.7504		0.0195	0.0200	-2.4	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3297		0.0226	0.0200	12.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2738		0.0200	0.0200	0.0	20.0
n-Propylbenzene	Ave	0.7729	0.8537		0.0221	0.0200	10.5	20.0
2-Chlorotoluene	Ave	0.6541	0.7208		0.0220	0.0200	10.2	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.464		0.0221	0.0200	10.7	20.0
4-Chlorotoluene	Ave	0.7072	0.7451		0.0211	0.0200	5.3	20.0
tert-Butylbenzene	Ave	2.113	2.116		0.0200	0.0200	0.2	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.508		0.0222	0.0200	11.1	20.0
sec-Butylbenzene	Ave	2.845	3.035		0.0213	0.0200	6.7	20.0
1,3-Dichlorobenzene	Ave	1.412	1.421	0.6000	0.0201	0.0200	0.6	20.0
p-Isopropyltoluene	Ave	2.492	2.611		0.0210	0.0200	4.8	20.0
1,4-Dichlorobenzene	Ave	1.459	1.444	0.5000	0.0198	0.0200	-1.0	20.0
n-Butylbenzene	Ave	2.050	2.162		0.0211	0.0200	5.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.415	0.4000	0.0221	0.0200	10.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447506/4 Calibration Date: 08/17/2020 17:46

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: U1916391.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	0.2751	0.0500	0.0225	0.0200	12.3	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.7774	0.2000	0.0182	0.0200	-9.1	50.0
Hexachlorobutadiene	Ave	0.4392	0.3190		0.0145	0.0200	-27.4	50.0
Naphthalene	Ave	2.363	2.668		0.0226	0.0200	12.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.7679		0.0200	0.0200	0.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2767		0.0206	0.0200	2.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.3094		0.0200	0.0200	0.0	20.0
Toluene-d8 (Surr)	Ave	1.199	1.374		0.0229	0.0200	14.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4946		0.0219	0.0200	9.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447698/3 Calibration Date: 08/18/2020 19:05

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: U1916420.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		0.0460		0.230	0.200	14.8	20.0
Diisopropyl ether	Ave	0.2313	0.2110		0.0182	0.0200	-8.8	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.4061		0.0204	0.0200	2.1	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6542		0.0180	0.0200	-9.9	20.0
Ethyl acetate	Ave	0.3007	0.3370		0.0448	0.0400	12.0	20.0
Propionitrile	Ave	0.0408	0.0638		0.313	0.200	56.5*	20.0
Methacrylonitrile	Ave	0.1828	0.2132		0.233	0.200	16.6	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.7094		0.0184	0.0200	-7.9	20.0
n-Butanol	Ave	0.0094	0.0158		0.842	0.500	68.5*	20.0
Ethyl acrylate	Ave	0.3703	0.3979		0.0215	0.0200	7.4	20.0
Methyl methacrylate	Ave	0.2459	0.2489		0.0405	0.0400	1.2	20.0
2-Nitropropane	Ave	0.0726	0.0916		0.0505	0.0400	26.2*	20.0
n-Butyl acetate	Ave	0.5364	0.5662		0.0211	0.0200	5.6	20.0
1-Chlorohexane	Ave	0.4610	0.4428		0.0192	0.0200	-4.0	20.0
Cyclohexanone	Ave	0.0137	0.0194		0.283	0.200	41.5*	20.0
Pentachloroethane	Ave	0.3462	0.4357		0.0503	0.0400	25.9*	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.413		0.0212	0.0200	6.0	20.0
Benzyl chloride	Ave	1.286	1.765		0.0274	0.0200	37.2*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8536		0.0167	0.0200	-16.4	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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447698/4 Calibration Date: 08/18/2020 19:27

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: U1916421.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	0.3766	0.1000	0.0196	0.0200	-2.2	20.0
Chloromethane	Ave	0.2883	0.3111	0.1000	0.0216	0.0200	7.9	20.0
Butadiene	Ave	0.2887	0.3144		0.0218	0.0200	8.9	20.0
Vinyl chloride	Ave	0.2980	0.3296	0.1000	0.0221	0.0200	10.6	20.0
Bromomethane	Ave	0.2335	0.2244	0.0500	0.0192	0.0200	-3.9	20.0
Chloroethane	Ave	0.1848	0.2068	0.0500	0.0224	0.0200	11.9	20.0
Dichlorofluoromethane	Ave	0.4581	0.4563		0.0199	0.0200	-0.4	20.0
Trichlorofluoromethane	Ave	0.4984	0.4283	0.1000	0.0172	0.0200	-14.0	20.0
Ethyl ether	Ave	0.1800	0.2060		0.0229	0.0200	14.4	20.0
Acrolein	Ave	0.0445	0.0221		0.0497	0.100	-50.3*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3506	0.1000	0.0195	0.0200	-2.3	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2567	0.2610	0.0500	0.0203	0.0200	1.7	20.0
Acetone	Ave	0.0784	0.0957	0.0100	0.0488	0.0400	22.1	50.0
Iodomethane	Ave	0.4655	0.4050		0.0174	0.0200	-13.0	20.0
Carbon disulfide	Ave	0.7515	0.7418	0.1000	0.0197	0.0200	-1.3	20.0
3-Chloro-1-propene	Ave	0.3541	0.3420		0.0193	0.0200	-3.4	20.0
Methyl acetate	Ave	0.2328	0.2702	0.1000	0.0464	0.0400	16.1	50.0
Methylene Chloride	Ave	0.2846	0.2956	0.1000	0.0208	0.0200	3.8	50.0
tert-Butyl alcohol	Ave	0.0271	0.0309		0.228	0.200	14.1	20.0
Acrylonitrile	Ave	0.1006	0.1272		0.253	0.200	26.5*	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3517	0.1000	0.0208	0.0200	3.8	20.0
Methyl tert-butyl ether	Ave	0.6938	0.6646	0.1000	0.0192	0.0200	-4.2	20.0
Hexane	Ave	0.3524	0.3745		0.0213	0.0200	6.3	20.0
1,1-Dichloroethane	Ave	0.4048	0.4314	0.2000	0.0213	0.0200	6.6	20.0
Vinyl acetate	Ave	0.4639	0.4675		0.0202	0.0200	0.8	20.0
2,2-Dichloropropane	Ave	0.2438	0.2881		0.0236	0.0200	18.2	20.0
2-Butanone	Ave	0.0472	0.0515	0.0100	0.0436	0.0400	8.9	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2797	0.1000	0.0193	0.0200	-3.3	20.0
Bromochloromethane	Ave	0.1945	0.1964		0.0202	0.0200	0.9	20.0
Tetrahydrofuran	Lin1		0.1455		0.0571	0.0400	42.8*	20.0
Chloroform	Ave	0.4433	0.4477	0.2000	0.0202	0.0200	1.0	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3821	0.1000	0.0183	0.0200	-8.5	20.0
Cyclohexane	Ave	0.3819	0.3906	0.1000	0.0205	0.0200	2.3	20.0
1,1-Dichloropropene	Ave	0.3519	0.3594		0.0204	0.0200	2.1	20.0
Carbon tetrachloride	Ave	0.4023	0.3475	0.1000	0.0173	0.0200	-13.6	20.0
Isobutyl alcohol	Ave	0.0110	0.0131		0.595	0.500	18.9	20.0
Benzene	Ave	0.9518	1.025	0.5000	0.0215	0.0200	7.7	20.0
1,2-Dichloroethane	Ave	0.3600	0.3302	0.1000	0.0183	0.0200	-8.3	20.0
n-Heptane	Lin1		0.1857		0.0165	0.0200	-17.5	20.0
Trichloroethene	Ave	0.3160	0.2898	0.1500	0.0183	0.0200	-8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447698/4 Calibration Date: 08/18/2020 19:27

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: U1916421.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	0.4212	0.1000	0.0184	0.0200	-8.2	20.0
1,2-Dichloropropane	Ave	0.2208	0.2369	0.1000	0.0215	0.0200	7.3	20.0
1,4-Dioxane	Ave	0.0024	0.0045		0.748	0.400	87.1*	50.0
Dibromomethane	Ave	0.2271	0.1798		0.0158	0.0200	-20.8*	20.0
Bromodichloromethane	Ave	0.3479	0.3179	0.1500	0.0183	0.0200	-8.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1790		0.0404	0.0400	1.1	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3784	0.1500	0.0196	0.0200	-2.1	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3592	0.0500	0.0449	0.0400	12.1	50.0
Toluene	Ave	1.352	1.476	0.4000	0.0218	0.0200	9.2	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4770	0.1000	0.0198	0.0200	-1.0	20.0
Ethyl methacrylate	Ave	0.4344	0.4662		0.0215	0.0200	7.3	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3119	0.1000	0.0220	0.0200	9.8	20.0
1,3-Dichloropropane	Ave	0.4802	0.5338		0.0222	0.0200	11.1	20.0
Tetrachloroethene	Ave	0.4313	0.3912	0.1500	0.0181	0.0200	-9.3	20.0
2-Hexanone	Ave	0.3149	0.3707	0.0500	0.0471	0.0400	17.7	50.0
Dibromochloromethane	Ave	0.3583	0.3487		0.0195	0.0200	-2.7	20.0
1,2-Dibromoethane	Ave	0.3346	0.3309		0.0198	0.0200	-1.1	20.0
Chlorobenzene	Ave	0.9253	0.9380	0.3000	0.0203	0.0200	1.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3398		0.0204	0.0200	1.9	20.0
Ethylbenzene	Ave	0.4836	0.4964		0.0205	0.0200	2.6	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6212		0.0211	0.0200	5.5	20.0
o-Xylene	Ave	0.5597	0.5999		0.0214	0.0200	7.2	20.0
Styrene	Ave	0.9588	1.013	0.3000	0.0211	0.0200	5.6	20.0
Bromoform	Ave	0.2933	0.2609	0.1000	0.0178	0.0200	-11.0	20.0
Isopropylbenzene	Ave	1.503	1.539	0.1000	0.0205	0.0200	2.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9377	0.3000	0.0243	0.0200	21.7*	20.0
Bromobenzene	Ave	0.7690	0.7156		0.0186	0.0200	-6.9	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3229		0.0221	0.0200	10.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2736		0.0200	0.0200	-0.0	20.0
n-Propylbenzene	Ave	0.7729	0.7937		0.0205	0.0200	2.7	20.0
2-Chlorotoluene	Ave	0.6541	0.6885		0.0211	0.0200	5.3	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.300		0.0207	0.0200	3.4	20.0
4-Chlorotoluene	Ave	0.7072	0.7060		0.0200	0.0200	-0.2	20.0
tert-Butylbenzene	Ave	2.113	1.968		0.0186	0.0200	-6.8	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.316		0.0205	0.0200	2.6	20.0
sec-Butylbenzene	Ave	2.845	2.821		0.0198	0.0200	-0.8	20.0
1,3-Dichlorobenzene	Ave	1.412	1.325	0.6000	0.0188	0.0200	-6.2	20.0
p-Isopropyltoluene	Ave	2.492	2.393		0.0192	0.0200	-4.0	20.0
1,4-Dichlorobenzene	Ave	1.459	1.356	0.5000	0.0186	0.0200	-7.1	20.0
n-Butylbenzene	Ave	2.050	1.957		0.0191	0.0200	-4.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.286	0.4000	0.0201	0.0200	0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447698/4 Calibration Date: 08/18/2020 19:27

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: U1916421.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	0.2495	0.0500	0.0204	0.0200	1.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.6560	0.2000	0.0153	0.0200	-23.3	50.0
Hexachlorobutadiene	Ave	0.4392	0.2774		0.0126	0.0200	-36.8	50.0
Naphthalene	Ave	2.363	2.319		0.0196	0.0200	-1.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.6650		0.0173	0.0200	-13.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2637		0.0196	0.0200	-2.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.2949		0.0191	0.0200	-4.6	20.0
Toluene-d8 (Surr)	Ave	1.199	1.320		0.0220	0.0200	10.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4696		0.0208	0.0200	4.1	20.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	96		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	96		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

Number TICs Found: 1 TIC Result Total: 6.22

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
109-99-9	Tetrahydrofuran	4.90	6.22		82%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	97		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 1 TIC Result Total: 11.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
109-99-9	Tetrahydrofuran	4.90	11.9		83%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 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)	87		75-130
460-00-4	4-Bromofluorobenzene (Surr)	101		47-134
2037-26-5	Toluene-d8 (Surr)	96		69-122
1868-53-7	Dibromofluoromethane (Surr)	83		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 Units: ug/L

Number TICs Found: 1 TIC Result Total: 31.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
109-99-9	Tetrahydrofuran	4.37	31.5		89%

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 07/24/2018 17:22

Analysis Batch Number: 337766 End Date: 07/24/2018 21:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-337766/1		07/24/2018 17:22	1	bfb036.d	DB-624 0.18(mm)
STD8260 240-337766/2 IC		07/24/2018 17:50	1	U1900783.d	DB-624 0.18(mm)
STD8260 240-337766/3 IC		07/24/2018 18:13	1	U1900784.d	DB-624 0.18(mm)
STD8260 240-337766/9 IC		07/24/2018 18:35	1	U1900790.d	DB-624 0.18(mm)
ICIS 240-337766/10		07/24/2018 18:57	1	U1900791.d	DB-624 0.18(mm)
STD8260 240-337766/11 IC		07/24/2018 19:20	1	U1900792.d	DB-624 0.18(mm)
STD8260 240-337766/12 IC		07/24/2018 19:42	1	U1900793.d	DB-624 0.18(mm)
STD8260 240-337766/13 IC		07/24/2018 20:04	1	U1900794.d	DB-624 0.18(mm)
ICV 240-337766/14		07/24/2018 20:26	1		DB-624 0.18(mm)
MRL 240-337766/15 MDLV		07/24/2018 20:48	1		DB-624 0.18(mm)
MDLV 240-337766/16		07/24/2018 21:10	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 07/25/2018 11:28

Analysis Batch Number: 337917 End Date: 07/25/2018 19:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-337917/1		07/25/2018 11:28	1	bfb037.d	DB-624 0.18(mm)
CCVIS 240-337917/3		07/25/2018 12:17	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 12:39	1		DB-624 0.18(mm)
STDA9 240-337917/8 IC		07/25/2018 13:24	1	U1900802.d	DB-624 0.18(mm)
STDA9 240-337917/9 IC		07/25/2018 13:46	1	U1900803.d	DB-624 0.18(mm)
STDA9 240-337917/10 IC		07/25/2018 14:08	1	U1900804.d	DB-624 0.18(mm)
STDA9 240-337917/11 IC		07/25/2018 14:30	1	U1900805.d	DB-624 0.18(mm)
STDA9 240-337917/12 IC		07/25/2018 14:52	1	U1900806.d	DB-624 0.18(mm)
STDA9 240-337917/13 IC		07/25/2018 15:15	1	U1900807.d	DB-624 0.18(mm)
ICV 240-337917/14		07/25/2018 15:37	1	U1900808.d	DB-624 0.18(mm)
MRL 240-337917/15 MDLV		07/25/2018 15:59	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 16:21	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 16:44	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 17:06	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 17:29	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 17:51	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 18:13	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 18:35	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 18:57	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 19:20	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 19:42	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/27/2018 16:23

Analysis Batch Number: 342719 End Date: 08/27/2018 20:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-342719/1		08/27/2018 16:23	1	bfb058.d	DB-624 0.18(mm)
CCV 240-342719/2		08/27/2018 16:46	1		DB-624 0.18(mm)
STD8260 240-342719/7 IC		08/27/2018 17:09	1	U1901323.d	DB-624 0.18(mm)
STD8260 240-342719/8 IC		08/27/2018 17:31	1	U1901324.d	DB-624 0.18(mm)
STD8260 240-342719/9 IC		08/27/2018 17:53	1	U1901325.d	DB-624 0.18(mm)
ICIS 240-342719/10		08/27/2018 18:16	1	U1901326.d	DB-624 0.18(mm)
STD8260 240-342719/11 IC		08/27/2018 18:38	1	U1901327.d	DB-624 0.18(mm)
STD8260 240-342719/12 IC		08/27/2018 19:01	1	U1901328.d	DB-624 0.18(mm)
STD8260 240-342719/13 IC		08/27/2018 19:23	1	U1901329.d	DB-624 0.18(mm)
ICV 240-342719/14		08/27/2018 19:45	1	U1901330.d	DB-624 0.18(mm)
MRL 240-342719/15 MDLV		08/27/2018 20:07	1		DB-624 0.18(mm)
MDLV 240-342719/16		08/27/2018 20:30	1		DB-624 0.18(mm)
ZZZZZ		08/27/2018 20:52	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Start Date: 04/30/2019 13:47

Analysis Batch Number: 378870 End Date: 04/30/2019 21:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-378870/1		04/30/2019 13:47	1	BFB4108.D	DB-624 0.18(mm)
STD8260 240-378870/8 IC		04/30/2019 14:10	1	U1269795.D	DB-624 0.18(mm)
STD8260 240-378870/9 IC		04/30/2019 14:33	1	U1269796.D	DB-624 0.18(mm)
STD8260 240-378870/10 IC		04/30/2019 14:55	1	U1269797.D	DB-624 0.18(mm)
ICIS 240-378870/11		04/30/2019 15:17	1	U1269798.D	DB-624 0.18(mm)
STD8260 240-378870/12 IC		04/30/2019 15:39	1	U1269799.D	DB-624 0.18(mm)
STD8260 240-378870/13 IC		04/30/2019 16:02	1	U1269800.D	DB-624 0.18(mm)
STD8260 240-378870/14 IC		04/30/2019 16:24	1	U1269801.D	DB-624 0.18(mm)
ICV 240-378870/15		04/30/2019 16:46	1	U1269802.D	DB-624 0.18(mm)
MRL 240-378870/16 MDLV		04/30/2019 17:09	1		DB-624 0.18(mm)
STDA9 240-378870/18 IC		04/30/2019 17:52	1	U1269805.D	DB-624 0.18(mm)
STDA9 240-378870/19 IC		04/30/2019 18:14	1	U1269806a.D	DB-624 0.18(mm)
STDA9 240-378870/20 IC		04/30/2019 18:37	1	U1269807.D	DB-624 0.18(mm)
STDA9 240-378870/21 IC		04/30/2019 18:59	1	U1269808.D	DB-624 0.18(mm)
STDA9 240-378870/22 IC		04/30/2019 19:21	1	U1269809.D	DB-624 0.18(mm)
STDA9 240-378870/23 IC		04/30/2019 19:43	1	U1269810.D	DB-624 0.18(mm)
STDA9 240-378870/24 IC		04/30/2019 20:05	1	U1269811.D	DB-624 0.18(mm)
ICV 240-378870/25		04/30/2019 20:27	1		DB-624 0.18(mm)
MRL 240-378870/26 MDLV		04/30/2019 20:50	1		DB-624 0.18(mm)
ZZZZZ		04/30/2019 21:12	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Start Date: 07/16/2020 16:09

Analysis Batch Number: 442963 End Date: 07/16/2020 21:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-442963/1		07/16/2020 16:09	1	BFB4436a.D	DB-624 0.18(mm)
STD8260 240-442963/9 IC		07/16/2020 17:43	1	U1279113.D	DB-624 0.18(mm)
STD8260 240-442963/10 IC		07/16/2020 18:05	1	U1279114.D	DB-624 0.18(mm)
STD8260 240-442963/11 IC		07/16/2020 18:27	1	U1279115.D	DB-624 0.18(mm)
STD8260 240-442963/12 IC		07/16/2020 18:50	1	U1279116.D	DB-624 0.18(mm)
ICIS 240-442963/13		07/16/2020 19:12	1	U1279117.D	DB-624 0.18(mm)
STD8260 240-442963/14 IC		07/16/2020 19:35	1	U1279118.D	DB-624 0.18(mm)
STD8260 240-442963/15 IC		07/16/2020 19:57	1	U1279119.D	DB-624 0.18(mm)
STD8260 240-442963/16 IC		07/16/2020 20:20	1	U1279120.D	DB-624 0.18(mm)
ICV 240-442963/17		07/16/2020 20:43	1	U1279121.D	DB-624 0.18(mm)
MDLV 240-442963/18		07/16/2020 21:05	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/14/2020 17:20

Analysis Batch Number: 447281 End Date: 08/15/2020 03:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447281/1		08/14/2020 17:20	1	bfb599.d	DB-624 0.18(mm)
CCV 240-447281/3		08/14/2020 17:44	1	U1916360.d	DB-624 0.18(mm)
CCVIS 240-447281/4		08/14/2020 18:06	1	U1916361.d	DB-624 0.18(mm)
LCS 240-447281/5		08/14/2020 18:29	1	U1916362.d	DB-624 0.18(mm)
MRL 240-447281/6 MDLV		08/14/2020 18:51	1		DB-624 0.18(mm)
MRL 240-447281/7 MDLV		08/14/2020 19:13	1		DB-624 0.18(mm)
MB 240-447281/8		08/14/2020 19:36	1	U1916365.d	DB-624 0.18(mm)
ZZZZZ		08/14/2020 19:58	20		DB-624 0.18(mm)
ZZZZZ		08/14/2020 20:21	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 20:43	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 21:05	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 21:27	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 21:50	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 22:12	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 22:35	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 22:57	1		DB-624 0.18(mm)
240-134931-20		08/14/2020 23:20	1	U1916375.d	DB-624 0.18(mm)
240-134931-21		08/14/2020 23:42	1	U1916376.d	DB-624 0.18(mm)
240-134931-22		08/15/2020 00:04	1	U1916377.d	DB-624 0.18(mm)
240-134931-23		08/15/2020 00:27	1	U1916378.d	DB-624 0.18(mm)
240-134931-24		08/15/2020 00:49	1	U1916379.d	DB-624 0.18(mm)
240-134931-25		08/15/2020 01:12	1	U1916380.d	DB-624 0.18(mm)
240-134931-26		08/15/2020 01:34	1	U1916381.d	DB-624 0.18(mm)
240-134931-27		08/15/2020 01:57	1	U1916382.d	DB-624 0.18(mm)
240-134931-28		08/15/2020 02:19	1	U1916383.d	DB-624 0.18(mm)
240-134931-29		08/15/2020 02:41	1	U1916384.d	DB-624 0.18(mm)
ZZZZZ		08/15/2020 03:04	20		DB-624 0.18(mm)
ZZZZZ		08/15/2020 03:26	20		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/17/2020 17:02

Analysis Batch Number: 447506 End Date: 08/18/2020 04:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447506/1		08/17/2020 17:02	1	bfb600.d	DB-624 0.18(mm)
CCV 240-447506/3		08/17/2020 17:24	1	U1916390.d	DB-624 0.18(mm)
CCVIS 240-447506/4		08/17/2020 17:46	1	U1916391.d	DB-624 0.18(mm)
LCS 240-447506/5		08/17/2020 18:09	1	U1916392.d	DB-624 0.18(mm)
MRL 240-447506/6 MDLV		08/17/2020 18:31	1		DB-624 0.18(mm)
MRL 240-447506/7 MDLV		08/17/2020 18:53	1		DB-624 0.18(mm)
MB 240-447506/8		08/17/2020 19:16	1	U1916395.d	DB-624 0.18(mm)
ZZZZZ		08/17/2020 21:07	20		DB-624 0.18(mm)
200-54623-C-4 MS		08/17/2020 21:29	20	U1916401.d	DB-624 0.18(mm)
200-54623-C-4 MSD		08/17/2020 21:52	20	U1916402.d	DB-624 0.18(mm)
240-134931-1		08/17/2020 22:37	1	U1916404.d	DB-624 0.18(mm)
240-134931-2		08/17/2020 22:59	1	U1916405.d	DB-624 0.18(mm)
240-134931-3		08/17/2020 23:22	1	U1916406.d	DB-624 0.18(mm)
240-134931-4		08/17/2020 23:44	1	U1916407.d	DB-624 0.18(mm)
240-134931-5		08/18/2020 00:06	1	U1916408.d	DB-624 0.18(mm)
240-134931-6		08/18/2020 00:29	1	U1916409.d	DB-624 0.18(mm)
240-134931-7		08/18/2020 00:51	1	U1916410.d	DB-624 0.18(mm)
240-134931-8		08/18/2020 01:14	1	U1916411.d	DB-624 0.18(mm)
240-134931-9		08/18/2020 01:36	1	U1916412.d	DB-624 0.18(mm)
240-134931-10		08/18/2020 01:59	1	U1916413.d	DB-624 0.18(mm)
240-134931-18		08/18/2020 02:21	1	U1916414.d	DB-624 0.18(mm)
240-134931-19		08/18/2020 02:44	1	U1916415.d	DB-624 0.18(mm)
240-134931-30		08/18/2020 03:06	1	U1916416.d	DB-624 0.18(mm)
240-134931-31		08/18/2020 03:28	1	U1916417.d	DB-624 0.18(mm)
240-134931-32		08/18/2020 03:51	1	U1916418.d	DB-624 0.18(mm)
240-134931-33		08/18/2020 04:13	1	U1916419.d	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/18/2020 18:41

Analysis Batch Number: 447698 End Date: 08/19/2020 04:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447698/1		08/18/2020 18:41	1	bfb601.d	DB-624 0.18(mm)
CCV 240-447698/3		08/18/2020 19:05	1	U1916420.d	DB-624 0.18(mm)
CCVIS 240-447698/4		08/18/2020 19:27	1	U1916421.d	DB-624 0.18(mm)
LCS 240-447698/5		08/18/2020 19:50	1	U1916422.d	DB-624 0.18(mm)
MRL 240-447698/6 MDLV		08/18/2020 20:12	1		DB-624 0.18(mm)
MRL 240-447698/7 MDLV		08/18/2020 20:35	1		DB-624 0.18(mm)
MB 240-447698/8		08/18/2020 20:57	1	U1916425.d	DB-624 0.18(mm)
240-134931-1		08/18/2020 21:19	1	U1916426.d	DB-624 0.18(mm)
240-134931-2		08/18/2020 21:42	1	U1916427.d	DB-624 0.18(mm)
240-134931-3		08/18/2020 22:04	1	U1916428.d	DB-624 0.18(mm)
240-134931-4		08/18/2020 22:27	1	U1916429.d	DB-624 0.18(mm)
240-134931-5		08/18/2020 22:49	1	U1916430.d	DB-624 0.18(mm)
240-134931-6		08/18/2020 23:12	1	U1916431.d	DB-624 0.18(mm)
240-134931-8		08/18/2020 23:34	1	U1916432.d	DB-624 0.18(mm)
240-134931-9		08/18/2020 23:56	1	U1916433.d	DB-624 0.18(mm)
240-134931-10		08/19/2020 00:18	1	U1916434.d	DB-624 0.18(mm)
240-134931-18		08/19/2020 00:41	1	U1916435.d	DB-624 0.18(mm)
240-134931-19		08/19/2020 01:03	1	U1916436.d	DB-624 0.18(mm)
240-134931-30		08/19/2020 01:26	1	U1916437.d	DB-624 0.18(mm)
240-134931-31		08/19/2020 01:48	1	U1916438.d	DB-624 0.18(mm)
240-134931-32		08/19/2020 02:10	1	U1916439.d	DB-624 0.18(mm)
240-134931-33		08/19/2020 02:32	1	U1916440.d	DB-624 0.18(mm)
240-134931-11		08/19/2020 02:55	1	U1916441.d	DB-624 0.18(mm)
240-134931-12		08/19/2020 03:18	1	U1916442.d	DB-624 0.18(mm)
240-134931-13		08/19/2020 03:40	1	U1916443.d	DB-624 0.18(mm)
240-134931-14		08/19/2020 04:02	1	U1916444.d	DB-624 0.18(mm)
240-134931-15		08/19/2020 04:24	1	U1916445.d	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Start Date: 08/19/2020 15:23

Analysis Batch Number: 447867 End Date: 08/20/2020 03:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447867/1		08/19/2020 15:23	1	BFB4462.D	DB-624 0.18(mm)
CCV 240-447867/3		08/19/2020 15:46	1	U1279807.D	DB-624 0.18(mm)
CCVIS 240-447867/4		08/19/2020 16:09	1	U1279808.D	DB-624 0.18(mm)
LCS 240-447867/5		08/19/2020 16:31	1	U1279809.D	DB-624 0.18(mm)
MRL 240-447867/6 MDLV		08/19/2020 16:53	1		DB-624 0.18(mm)
MRL 240-447867/7 MDLV		08/19/2020 17:16	1		DB-624 0.18(mm)
MB 240-447867/8		08/19/2020 17:38	1	U1279812.D	DB-624 0.18(mm)
ZZZZZ		08/19/2020 20:38	12.5		DB-624 0.18(mm)
ZZZZZ		08/19/2020 21:00	125		DB-624 0.18(mm)
240-135021-B-1 MS		08/19/2020 21:22	125	U1279822a.D	DB-624 0.18(mm)
240-135021-B-1 MSD		08/19/2020 21:45	125	U1279823a.D	DB-624 0.18(mm)
ZZZZZ		08/19/2020 22:30	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 22:52	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 23:14	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 23:37	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 23:59	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 00:22	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 00:45	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 01:07	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 01:30	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 01:52	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 02:15	1		DB-624 0.18(mm)
240-134931-16		08/20/2020 02:37	1	U1279836.D	DB-624 0.18(mm)
240-134931-17		08/20/2020 03:00	1	U1279837.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 337917 Batch Start Date: 07/25/18 11:28 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00001	vm50ss_stk 00077	vmbfb 00020	VMFASA9W 00194
BFB 240-337917/1		8260C		5 mL	5 mL			1 uL	
STDA9 240-337917/8 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/9 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/10 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/11 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/12 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/13 IC		8260C		5 mL	5 mL	2 uL			
ICV 240-337917/14		8260C		5 mL	5 mL	2 uL	2 uL		16 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmra9w 00259					
BFB 240-337917/1		8260C							
STDA9 240-337917/8 IC		8260C		64 uL					
STDA9 240-337917/9 IC		8260C		32 uL					
STDA9 240-337917/10 IC		8260C		16 uL					
STDA9 240-337917/11 IC		8260C		8 uL					
STDA9 240-337917/12 IC		8260C		0.8 uL					
STDA9 240-337917/13 IC		8260C		0.4 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 337917 Batch Start Date: 07/25/18 11:28 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmra9w 00259					
ICV 240-337917/14		8260C							

Batch Notes	
pH Indicator ID	HC746949

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 342719 Batch Start Date: 08/27/18 16:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00001	vm50ss 00333	vm50ss_stk 00077	vmarolistdw 00260
BFB 240-342719/1		8260C		5 mL	5 mL				
STD8260 240-342719/7 IC		8260C		5 mL	5 mL	2 uL	64 uL		64 uL
STD8260 240-342719/8 IC		8260C		5 mL	5 mL	2 uL	48 uL		48 uL
STD8260 240-342719/9 IC		8260C		5 mL	5 mL	2 uL	32 uL		32 uL
ICIS 240-342719/10		8260C		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-342719/11 IC		8260C		5 mL	5 mL	2 uL	8 uL		8 uL
STD8260 240-342719/12 IC		8260C		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD8260 240-342719/13 IC		8260C		5 mL	5 mL	2 uL	0.4 uL		0.4 uL
ICV 240-342719/14		8260C		5 mL	5 mL	2 uL		2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	vmfasaw 00246	vmfasgw 00271	vmfaspw 00264	vmrgas 00259	vmrprimw 00297
BFB 240-342719/1		8260C		1 uL					
STD8260 240-342719/7 IC		8260C						64 uL	64 uL
STD8260 240-342719/8 IC		8260C						48 uL	48 uL
STD8260 240-342719/9 IC		8260C						32 uL	32 uL
ICIS 240-342719/10		8260C						16 uL	16 uL
STD8260 240-342719/11 IC		8260C						8 uL	8 uL
STD8260 240-342719/12 IC		8260C						0.8 uL	0.8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 342719 Batch Start Date: 08/27/18 16:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	vmfasaw 00246	vmfasgw 00271	vmfaspw 00264	vmrgas 00259	vmrprimw 00297
STD8260 240-342719/13 IC		8260C						0.4 uL	0.4 uL
ICV 240-342719/14		8260C			16 uL	16 uL	16 uL		

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00003	vm50ss 00362	vm50ss_stk 00080	vmarolistdw 00294
BFB 240-378870/1		8260C		5 mL	5 mL				
STD8260 240-378870/8 IC		8260C		5 mL	5 mL	2 uL	64 uL		64 uL
STD8260 240-378870/9 IC		8260C		5 mL	5 mL	2 uL	48 uL		48 uL
STD8260 240-378870/10 IC		8260C		5 mL	5 mL	2 uL	32 uL		32 uL
ICIS 240-378870/11		8260C		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-378870/12 IC		8260C		5 mL	5 mL	2 uL	8 uL		8 uL
STD8260 240-378870/13 IC		8260C		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD8260 240-378870/14 IC		8260C		5 mL	5 mL	2 uL	0.4 uL		0.4 uL
ICV 240-378870/15		8260C		5 mL	5 mL	2 uL		2 uL	
STDA9 240-378870/18 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/19 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/20 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/21 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/22 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/23 IC		8260C		5 mL	5 mL	2 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00003	vm50ss 00362	vm50ss_stk 00080	vmarolistdw 00294
STDA9 240-378870/24 IC		8260C		5 mL	5 mL	2 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00021	vmfasaw 00277	vmfasgw 00307	vmfaspw 00297	vmra9w 00295	vmrgas 00291
BFB 240-378870/1		8260C		1 uL					
STD8260 240-378870/8 IC		8260C							64 uL
STD8260 240-378870/9 IC		8260C							48 uL
STD8260 240-378870/10 IC		8260C							32 uL
ICIS 240-378870/11		8260C							16 uL
STD8260 240-378870/12 IC		8260C							8 uL
STD8260 240-378870/13 IC		8260C							0.8 uL
STD8260 240-378870/14 IC		8260C							0.4 uL
ICV 240-378870/15		8260C			16 uL	16 uL	16 uL		
STDA9 240-378870/18 IC		8260C						64 uL	
STDA9 240-378870/19 IC		8260C						48 uL	
STDA9 240-378870/20 IC		8260C						32 uL	
STDA9 240-378870/21 IC		8260C						16 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00021	vmfasaw 00277	vmfasgw 00307	vmfaspw 00297	vmra9w 00295	vmrgas 00291
STDA9 240-378870/22 IC		8260C						8 uL	
STDA9 240-378870/23 IC		8260C						0.8 uL	
STDA9 240-378870/24 IC		8260C						0.4 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00331					
BFB 240-378870/1		8260C							
STD8260 240-378870/8 IC		8260C		64 uL					
STD8260 240-378870/9 IC		8260C		48 uL					
STD8260 240-378870/10 IC		8260C		32 uL					
ICIS 240-378870/11		8260C		16 uL					
STD8260 240-378870/12 IC		8260C		8 uL					
STD8260 240-378870/13 IC		8260C		0.8 uL					
STD8260 240-378870/14 IC		8260C		0.4 uL					
ICV 240-378870/15		8260C							
STDA9 240-378870/18 IC		8260C							
STDA9 240-378870/19 IC		8260C							
STDA9 240-378870/20 IC		8260C							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00331					
STDA9 240-378870/21 IC		8260C							
STDA9 240-378870/22 IC		8260C							
STDA9 240-378870/23 IC		8260C							
STDA9 240-378870/24 IC		8260C							

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 442963 Batch Start Date: 07/16/20 16:09 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_a 00006	vm50ss 00410	vm50ss_stk 00085	vmarolistdw 00352
BFB 240-442963/1		8260C		5 mL	5 mL				
STD8260 240-442963/9 IC		8260C		5 mL	5 mL	2 uL	0.4 uL		0.4 uL
STD8260 240-442963/10 IC		8260C		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD8260 240-442963/11 IC		8260C		5 mL	5 mL	2 uL	4 uL		4 uL
STD8260 240-442963/12 IC		8260C		5 mL	5 mL	2 uL	8 uL		8 uL
ICIS 240-442963/13		8260C		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-442963/14 IC		8260C		5 mL	5 mL	2 uL	32 uL		32 uL
STD8260 240-442963/15 IC		8260C		5 mL	5 mL	2 uL	48 uL		48 uL
STD8260 240-442963/16 IC		8260C		5 mL	5 mL	2 uL	64 uL		64 uL
ICV 240-442963/17		8260C		5 mL	5 mL	2 uL		2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00336	vmfasgw 00367	vmfaspw 00358	VMRGAS 00347	vmrprimw 00394
BFB 240-442963/1		8260C		1 uL					
STD8260 240-442963/9 IC		8260C						0.4 uL	0.4 uL
STD8260 240-442963/10 IC		8260C						0.8 uL	0.8 uL
STD8260 240-442963/11 IC		8260C						4 uL	4 uL
STD8260 240-442963/12 IC		8260C						8 uL	8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 442963 Batch Start Date: 07/16/20 16:09 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00336	vmfasgw 00367	vmfaspw 00358	VMRGAS 00347	vmrprimw 00394
ICIS 240-442963/13		8260C						16 uL	16 uL
STD8260 240-442963/14 IC		8260C						32 uL	32 uL
STD8260 240-442963/15 IC		8260C						48 uL	48 uL
STD8260 240-442963/16 IC		8260C						64 uL	64 uL
ICV 240-442963/17		8260C			16 uL	16 uL	16 uL		

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447281 Batch Start Date: 08/14/20 17:20 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00007	vm50ss_stk 00085	vmarolistdw 00356
BFB 240-447281/1		8260C		5 mL	5 mL				
CCV 240-447281/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447281/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447281/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447281/8		8260C		5 mL	5 mL		2 uL	2 uL	
240-134931-B-20	MSA-SW42D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-21	MSA-SW43A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-22	MSA-SW43B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-23	MSA-SW43C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-24	MSA-SW43D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-25	MSA-SW44A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-26	MSA-SW44B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-27	MSA-SW44C-081220	8260C	T	5 mL	5 mL	6 SU	2 uL	2 uL	
240-134931-B-28	MSA-SW44D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-29	TB-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00339	vmfasgw 00371	vmfaspw 00362	vmra9w 00356	vmrgas 00350
BFB 240-447281/1		8260C		1 uL					
CCV 240-447281/3		8260C						16 uL	
CCVIS 240-447281/4		8260C							16 uL
LCS 240-447281/5		8260C			16 uL	16 uL	16 uL		
MB 240-447281/8		8260C							
240-134931-B-20	MSA-SW42D-081220	8260C	T						
240-134931-C-21	MSA-SW43A-081220	8260C	T						
240-134931-B-22	MSA-SW43B-081220	8260C	T						
240-134931-B-23	MSA-SW43C-081220	8260C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447281 Batch Start Date: 08/14/20 17:20 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00339	vmfasgw 00371	vmfaspw 00362	vmra9w 00356	vmrgas 00350
240-134931-B-24	MSA-SW43D-081220	8260C	T						
240-134931-C-25	MSA-SW44A-081220	8260C	T						
240-134931-B-26	MSA-SW44B-081220	8260C	T						
240-134931-B-27	MSA-SW44C-081220	8260C	T						
240-134931-B-28	MSA-SW44D-081220	8260C	T						
240-134931-A-29	TB-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447281/1		8260C							
CCV 240-447281/3		8260C							
CCVIS 240-447281/4		8260C		16 uL					
LCS 240-447281/5		8260C							
MB 240-447281/8		8260C							
240-134931-B-20	MSA-SW42D-081220	8260C	T						
240-134931-C-21	MSA-SW43A-081220	8260C	T						
240-134931-B-22	MSA-SW43B-081220	8260C	T						
240-134931-B-23	MSA-SW43C-081220	8260C	T						
240-134931-B-24	MSA-SW43D-081220	8260C	T						
240-134931-C-25	MSA-SW44A-081220	8260C	T						
240-134931-B-26	MSA-SW44B-081220	8260C	T						
240-134931-B-27	MSA-SW44C-081220	8260C	T						
240-134931-B-28	MSA-SW44D-081220	8260C	T						
240-134931-A-29	TB-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447281 Batch Start Date: 08/14/20 17:20 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447506 Batch Start Date: 08/17/20 17:02 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00007	vm50ss_stk 00085	vmarolistdw 00356
BFB 240-447506/1		8260C		5 mL	5 mL				
CCV 240-447506/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447506/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447506/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447506/8		8260C		5 mL	5 mL		2 uL	2 uL	
200-54623-C-4 MS		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
200-54623-C-4 MSD		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-1	MSA-SW37A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-2	MSA-SW37B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-3	MSA-SW37C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-4	MSA-SW37D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-5	MSA-SW38A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-6	MSA-SW38B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-7	MSA-SW38C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-8	MSA-SW38D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-9	MSA-SW40A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-10	MSA-SW40B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-18	MSA-SW42B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-19	MSA-SW42C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-30	MSA-SW46A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-31	MSA-SW47A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-32	MSA-SW48A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-33	MSA-SW49A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00371	vmfaspw 00362	vmra9w 00357	vmrgas 00351
BFB 240-447506/1		8260C		1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447506 Batch Start Date: 08/17/20 17:02 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00371	vmfaspw 00362	vmra9w 00357	vmrgas 00351
CCV 240-447506/3		8260C						16 uL	
CCVIS 240-447506/4		8260C							16 uL
LCS 240-447506/5		8260C			16 uL	16 uL	16 uL		
MB 240-447506/8		8260C							
200-54623-C-4 MS		8260C	T		16 uL	16 uL	16 uL		
200-54623-C-4 MSD		8260C	T		16 uL	16 uL	16 uL		
240-134931-A-1	MSA-SW37A-081220	8260C	T						
240-134931-B-2	MSA-SW37B-081220	8260C	T						
240-134931-B-3	MSA-SW37C-081220	8260C	T						
240-134931-A-4	MSA-SW37D-081220	8260C	T						
240-134931-A-5	MSA-SW38A-081220	8260C	T						
240-134931-A-6	MSA-SW38B-081220	8260C	T						
240-134931-B-7	MSA-SW38C-081220	8260C	T						
240-134931-A-8	MSA-SW38D-081220	8260C	T						
240-134931-B-9	MSA-SW40A-081220	8260C	T						
240-134931-B-10	MSA-SW40B-081220	8260C	T						
240-134931-B-18	MSA-SW42B-081220	8260C	T						
240-134931-B-19	MSA-SW42C-081220	8260C	T						
240-134931-B-30	MSA-SW46A-081220	8260C	T						
240-134931-B-31	MSA-SW47A-081220	8260C	T						
240-134931-A-32	MSA-SW48A-081220	8260C	T						
240-134931-B-33	MSA-SW49A-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447506/1		8260C							
CCV 240-447506/3		8260C							
CCVIS 240-447506/4		8260C		16 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447506 Batch Start Date: 08/17/20 17:02 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
LCS 240-447506/5		8260C							
MB 240-447506/8		8260C							
200-54623-C-4 MS		8260C	T						
200-54623-C-4 MSD		8260C	T						
240-134931-A-1	MSA-SW37A-081220	8260C	T						
240-134931-B-2	MSA-SW37B-081220	8260C	T						
240-134931-B-3	MSA-SW37C-081220	8260C	T						
240-134931-A-4	MSA-SW37D-081220	8260C	T						
240-134931-A-5	MSA-SW38A-081220	8260C	T						
240-134931-A-6	MSA-SW38B-081220	8260C	T						
240-134931-B-7	MSA-SW38C-081220	8260C	T						
240-134931-A-8	MSA-SW38D-081220	8260C	T						
240-134931-B-9	MSA-SW40A-081220	8260C	T						
240-134931-B-10	MSA-SW40B-081220	8260C	T						
240-134931-B-18	MSA-SW42B-081220	8260C	T						
240-134931-B-19	MSA-SW42C-081220	8260C	T						
240-134931-B-30	MSA-SW46A-081220	8260C	T						
240-134931-B-31	MSA-SW47A-081220	8260C	T						
240-134931-A-32	MSA-SW48A-081220	8260C	T						
240-134931-B-33	MSA-SW49A-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447698 Batch Start Date: 08/18/20 18:41 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00007	vm50ss_stk 00085	vmarolistdw 00356
BFB 240-447698/1		8260C		5 mL	5 mL				
CCV 240-447698/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447698/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447698/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447698/8		8260C		5 mL	5 mL		2 uL	2 uL	
240-134931-B-1	MSA-SW37A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-2	MSA-SW37B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-3	MSA-SW37C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-4	MSA-SW37D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-5	MSA-SW38A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-6	MSA-SW38B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-8	MSA-SW38D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-9	MSA-SW40A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-10	MSA-SW40B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-18	MSA-SW42B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-19	MSA-SW42C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-30	MSA-SW46A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-31	MSA-SW47A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-32	MSA-SW48A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-33	MSA-SW49A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-11	MSA-SW40C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-12	MSA-SW40D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-13	MSA-SW41A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-14	MSA-SW41B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-15	MSA-SW41C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00372	vmfaspw 00362	vmra9w 00357	vmrgas 00351
BFB 240-447698/1		8260C		1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447698 Batch Start Date: 08/18/20 18:41 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00372	vmfaspw 00362	vmra9w 00357	vmrgas 00351
CCV 240-447698/3		8260C						16 uL	
CCVIS 240-447698/4		8260C							16 uL
LCS 240-447698/5		8260C			16 uL	16 uL	16 uL		
MB 240-447698/8		8260C							
240-134931-B-1	MSA-SW37A-081220	8260C	T						
240-134931-A-2	MSA-SW37B-081220	8260C	T						
240-134931-A-3	MSA-SW37C-081220	8260C	T						
240-134931-B-4	MSA-SW37D-081220	8260C	T						
240-134931-C-5	MSA-SW38A-081220	8260C	T						
240-134931-B-6	MSA-SW38B-081220	8260C	T						
240-134931-B-8	MSA-SW38D-081220	8260C	T						
240-134931-A-9	MSA-SW40A-081220	8260C	T						
240-134931-A-10	MSA-SW40B-081220	8260C	T						
240-134931-C-18	MSA-SW42B-081220	8260C	T						
240-134931-C-19	MSA-SW42C-081220	8260C	T						
240-134931-C-30	MSA-SW46A-081220	8260C	T						
240-134931-A-31	MSA-SW47A-081220	8260C	T						
240-134931-C-32	MSA-SW48A-081220	8260C	T						
240-134931-A-33	MSA-SW49A-081220	8260C	T						
240-134931-A-11	MSA-SW40C-081220	8260C	T						
240-134931-A-12	MSA-SW40D-081220	8260C	T						
240-134931-B-13	MSA-SW41A-081220	8260C	T						
240-134931-B-14	MSA-SW41B-081220	8260C	T						
240-134931-B-15	MSA-SW41C-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447698/1		8260C							
CCV 240-447698/3		8260C							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447698 Batch Start Date: 08/18/20 18:41 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
CCVIS 240-447698/4		8260C		16 uL					
LCS 240-447698/5		8260C							
MB 240-447698/8		8260C							
240-134931-B-1	MSA-SW37A-081220	8260C	T						
240-134931-A-2	MSA-SW37B-081220	8260C	T						
240-134931-A-3	MSA-SW37C-081220	8260C	T						
240-134931-B-4	MSA-SW37D-081220	8260C	T						
240-134931-C-5	MSA-SW38A-081220	8260C	T						
240-134931-B-6	MSA-SW38B-081220	8260C	T						
240-134931-B-8	MSA-SW38D-081220	8260C	T						
240-134931-A-9	MSA-SW40A-081220	8260C	T						
240-134931-A-10	MSA-SW40B-081220	8260C	T						
240-134931-C-18	MSA-SW42B-081220	8260C	T						
240-134931-C-19	MSA-SW42C-081220	8260C	T						
240-134931-C-30	MSA-SW46A-081220	8260C	T						
240-134931-A-31	MSA-SW47A-081220	8260C	T						
240-134931-C-32	MSA-SW48A-081220	8260C	T						
240-134931-A-33	MSA-SW49A-081220	8260C	T						
240-134931-A-11	MSA-SW40C-081220	8260C	T						
240-134931-A-12	MSA-SW40D-081220	8260C	T						
240-134931-B-13	MSA-SW41A-081220	8260C	T						
240-134931-B-14	MSA-SW41B-081220	8260C	T						
240-134931-B-15	MSA-SW41C-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447867 Batch Start Date: 08/19/20 15:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_a 00007	vm50ss_stk 00085	vmarolistdw 00357
BFB 240-447867/1		8260C		5 mL	5 mL				
CCV 240-447867/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447867/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447867/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447867/8		8260C		5 mL	5 mL		2 uL	2 uL	
240-135021-B-1 MS		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-135021-B-1 MSD		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-16	MSA-SW41D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-17	MSA-SW42A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00372	vmfaspw 00362	vmra9w 00357	vmrgas 00351
BFB 240-447867/1		8260C		1 uL					
CCV 240-447867/3		8260C						16 uL	
CCVIS 240-447867/4		8260C							16 uL
LCS 240-447867/5		8260C			16 uL	16 uL	16 uL		
MB 240-447867/8		8260C							
240-135021-B-1 MS		8260C	T		16 uL	16 uL	16 uL		
240-135021-B-1 MSD		8260C	T		16 uL	16 uL	16 uL		
240-134931-B-16	MSA-SW41D-081220	8260C	T						
240-134931-B-17	MSA-SW42A-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447867/1		8260C							
CCV 240-447867/3		8260C							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447867 Batch Start Date: 08/19/20 15:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
CCVIS 240-447867/4		8260C		16 uL					
LCS 240-447867/5		8260C							
MB 240-447867/8		8260C							
240-135021-B-1 MS		8260C	T						
240-135021-B-1 MSD		8260C	T						
240-134931-B-16	MSA-SW41D-081220	8260C	T						
240-134931-B-17	MSA-SW42A-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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ANALYTICAL REPORT

Job Number: 240-134931-1

SDG Number: MSA FMC

Job Description: MSA Surface Water

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Roxanne Cisneros

Approved for release.
Roxanne Cisneros
Senior Project Manager
8/23/2020 12:46 PM

Roxanne Cisneros, Senior Project Manager
4101 Shuffel Street NW, North Canton, OH, 44720
(615)301-5761
roxanne.cisneros@Eurofinset.com
08/23/2020

cc: Samantha Brenner
Kelly Carper

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Definitions/Glossary

Client: Tetra Tech, Inc. Job ID: 240-134931-1
Project/Site: MSA Surface Water SDG: MSA Frog Mortar Creek

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MSA Surface Water

Report Number: 240-134931-1

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.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 8/13/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples MSA-SW37A-081220 (240-134931-1), MSA-SW37B-081220 (240-134931-2), MSA-SW37C-081220 (240-134931-3), MSA-SW37D-081220 (240-134931-4), MSA-SW38A-081220 (240-134931-5), MSA-SW38B-081220 (240-134931-6), MSA-SW38C-081220 (240-134931-7), MSA-SW38D-081220 (240-134931-8), MSA-SW40A-081220 (240-134931-9), MSA-SW40B-081220 (240-134931-10), MSA-SW40C-081220 (240-134931-11), MSA-SW40D-081220 (240-134931-12), MSA-SW41A-081220 (240-134931-13), MSA-SW41B-081220 (240-134931-14), MSA-SW41C-081220 (240-134931-15), MSA-SW41D-081220 (240-134931-16), MSA-SW42A-081220 (240-134931-17), MSA-SW42B-081220 (240-134931-18), MSA-SW42C-081220 (240-134931-19), MSA-SW42D-081220 (240-134931-20), MSA-SW43A-081220 (240-134931-21), MSA-SW43B-081220 (240-134931-22), MSA-SW43C-081220 (240-134931-23), MSA-SW43D-081220 (240-134931-24), MSA-SW44A-081220 (240-134931-25), MSA-SW44B-081220 (240-134931-26), MSA-SW44C-081220 (240-134931-27), MSA-SW44D-081220 (240-134931-28), TB-081220 (240-134931-29), MSA-SW46A-081220 (240-134931-30), MSA-SW47A-081220 (240-134931-31), MSA-SW48A-081220 (240-134931-32) and MSA-SW49A-081220 (240-134931-33) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/14/2020, 08/15/2020, 08/17/2020, 08/18/2020, 08/19/2020 and 08/20/2020.

2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447281/5. 2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447506/5. 2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447698/5. 2-Chloroethyl vinyl ether failed the recovery criteria high for LCS 240-447867/5. Refer to the QC report for details.

Method 8260C: The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): MSA-SW44C-081220 (240-134931-27).

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447281 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW42D-081220 (240-134931-20),

MSA-SW43A-081220 (240-134931-21), MSA-SW43B-081220 (240-134931-22), MSA-SW43C-081220 (240-134931-23), MSA-SW43D-081220 (240-134931-24), MSA-SW44A-081220 (240-134931-25), MSA-SW44B-081220 (240-134931-26), MSA-SW44D-081220 (240-134931-28) and TB-081220 (240-134931-29). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 240-447281 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 analyte(s) is considered estimated.

Method 8260C: Batch analytical batch 240-447281 is reported without a matrix spike/matrix spike duplicate (MS/MSD), because the batch MS/MSD was canceled. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch.

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447506 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 240-447506 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 analyte(s) is considered estimated.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW37A-081220 (240-134931-1), MSA-SW37B-081220 (240-134931-2), MSA-SW37C-081220 (240-134931-3), MSA-SW37D-081220 (240-134931-4), MSA-SW38A-081220 (240-134931-5), MSA-SW38B-081220 (240-134931-6), MSA-SW38C-081220 (240-134931-7), MSA-SW38D-081220 (240-134931-8), MSA-SW40A-081220 (240-134931-9), MSA-SW40B-081220 (240-134931-10), MSA-SW42B-081220 (240-134931-18), MSA-SW42C-081220 (240-134931-19), MSA-SW46A-081220 (240-134931-30), MSA-SW47A-081220 (240-134931-31), MSA-SW48A-081220 (240-134931-32) and MSA-SW49A-081220 (240-134931-33). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447698 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 240-447698 recovered above the upper control limit for dibromomethane, and 1,1,2,2-tetrachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MSA-SW40C-081220 (240-134931-11), MSA-SW40D-081220 (240-134931-12), MSA-SW41A-081220 (240-134931-13), MSA-SW41B-081220 (240-134931-14), MSA-SW41C-081220 (240-134931-15) and (CCVIS 240-447698/4).

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW40C-081220 (240-134931-11), MSA-SW40D-081220 (240-134931-12), MSA-SW41A-081220 (240-134931-13), MSA-SW41B-081220 (240-134931-14) and MSA-SW41C-081220 (240-134931-15). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-447698.

Method 8260C: The laboratory control sample (LCS) for analytical batch 240-447867 recovered outside control limits for 2-chloroethyl vinyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MSA-SW41D-081220 (240-134931-16) and MSA-SW42A-081220 (240-134931-17). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260C: The continuing calibration verification (CCV) associated with batch 240-447867 recovered above the upper control limit for 2-methyl-2-propanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MSA-SW41D-081220 (240-134931-16), MSA-SW42A-081220 (240-134931-17) and (CCVIS 240-447867/4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 — Lab Sample ID: 240-134931-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	17		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW37B-081220 — Lab Sample ID: 240-134931-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.7		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW37C-081220 — Lab Sample ID: 240-134931-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.6		5.0	5.4	ug/L	1		8260C	Total/NA
Vinyl chloride	0.61		0.50	0.50	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW37D-081220 — Lab Sample ID: 240-134931-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW38A-081220 — Lab Sample ID: 240-134931-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.46	J	1.0	0.37	ug/L	1		8260C	Total/NA
Acetone	9.3		5.0	5.4	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.62	J	1.0	0.38	ug/L	1		8260C	Total/NA
Vinyl chloride	0.51		0.50	0.50	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW38B-081220 — Lab Sample ID: 240-134931-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW38C-081220 — Lab Sample ID: 240-134931-7

No Detections.

Client Sample ID: MSA-SW38D-081220 — Lab Sample ID: 240-134931-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.7		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW40A-081220 — Lab Sample ID: 240-134931-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW40B-081220 — Lab Sample ID: 240-134931-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.2		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW40C-081220 — Lab Sample ID: 240-134931-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.0		5.0	5.4	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 — Lab Sample ID: 240-134931-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW41A-081220 — Lab Sample ID: 240-134931-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.2		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW41B-081220 — Lab Sample ID: 240-134931-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.7		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW41C-081220 — Lab Sample ID: 240-134931-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.1		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW41D-081220 — Lab Sample ID: 240-134931-16

No Detections.

Client Sample ID: MSA-SW42A-081220 — Lab Sample ID: 240-134931-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW42B-081220 — Lab Sample ID: 240-134931-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.1		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW42C-081220 — Lab Sample ID: 240-134931-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.6		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW42D-081220 — Lab Sample ID: 240-134931-20

No Detections.

Client Sample ID: MSA-SW43A-081220 — Lab Sample ID: 240-134931-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW43B-081220 — Lab Sample ID: 240-134931-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.1		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW43C-081220 — Lab Sample ID: 240-134931-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.1		5.0	5.4	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 — Lab Sample ID: 240-134931-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.7		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW44A-081220 — Lab Sample ID: 240-134931-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW44B-081220 — Lab Sample ID: 240-134931-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.6		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW44C-081220 — Lab Sample ID: 240-134931-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW44D-081220 — Lab Sample ID: 240-134931-28

No Detections.

Client Sample ID: TB-081220 — Lab Sample ID: 240-134931-29

No Detections.

Client Sample ID: MSA-SW46A-081220 — Lab Sample ID: 240-134931-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		5.0	5.4	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.72	J	1.0	0.38	ug/L	1		8260C	Total/NA
Vinyl chloride	0.56		0.50	0.50	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW47A-081220 — Lab Sample ID: 240-134931-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10		5.0	5.4	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.42	J	1.0	0.38	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW48A-081220 — Lab Sample ID: 240-134931-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11		5.0	5.4	ug/L	1		8260C	Total/NA

Client Sample ID: MSA-SW49A-081220 — Lab Sample ID: 240-134931-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		5.0	5.4	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.50	J	1.0	0.38	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MSA-SW37A-081220

Date Collected: 08/12/20 10:18
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 22:37	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/17/20 22:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/17/20 22:37	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/17/20 22:37	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 22:37	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/17/20 22:37	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/17/20 22:37	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/17/20 22:37	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/17/20 22:37	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/17/20 22:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/17/20 22:37	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 22:37	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/17/20 22:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/17/20 22:37	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/17/20 22:37	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/17/20 22:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/17/20 22:37	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/17/20 22:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/17/20 22:37	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/17/20 22:37	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/17/20 22:37	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/17/20 22:37	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/17/20 22:37	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/17/20 22:37	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/17/20 22:37	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/17/20 22:37	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/17/20 22:37	1
Acetone	**17**		5.0	5.4	ug/L			08/18/20 21:19	1
Benzene	1.0	U	1.0	0.38	ug/L			08/17/20 22:37	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/17/20 22:37	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/17/20 22:37	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/17/20 22:37	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/17/20 22:37	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/17/20 22:37	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/17/20 22:37	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/17/20 22:37	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/17/20 22:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/17/20 22:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/17/20 22:37	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/17/20 22:37	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/17/20 22:37	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/17/20 22:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/17/20 22:37	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/17/20 22:37	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/17/20 22:37	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/17/20 22:37	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/17/20 22:37	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/17/20 22:37	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/17/20 22:37	1

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Date Collected: 08/12/20 10:18 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 22:37	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/17/20 22:37	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/17/20 22:37	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/17/20 22:37	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/17/20 22:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/17/20 22:37	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/17/20 22:37	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/17/20 22:37	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/17/20 22:37	1
Styrene	1.0	U	1.0	0.40	ug/L			08/17/20 22:37	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/17/20 22:37	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/17/20 22:37	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/17/20 22:37	1
Toluene	1.0	U	1.0	0.35	ug/L			08/17/20 22:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/17/20 22:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/17/20 22:37	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/17/20 22:37	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/17/20 22:37	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/17/20 22:37	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/17/20 22:37	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/17/20 22:37	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/17/20 22:37	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/17/20 22:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/17/20 22:37*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 21:19*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/17/20 22:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 130*		*08/17/20 22:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/18/20 21:19*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/17/20 22:37*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/18/20 21:19*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/17/20 22:37*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 21:19*	*1*
Dibromofluoromethane (Surr)	*102*		*78 - 129*		*08/17/20 22:37*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/18/20 21:19*	*1*

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Date Collected: 08/12/20 10:21 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 22:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/17/20 22:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/17/20 22:59	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/17/20 22:59	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 22:59	1

Client Sample ID: MSA-SW37B-081220

Date Collected: 08/12/20 10:21
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/17/20 22:59	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/17/20 22:59	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/17/20 22:59	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/17/20 22:59	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/17/20 22:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/17/20 22:59	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 22:59	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/17/20 22:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/17/20 22:59	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/17/20 22:59	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/17/20 22:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/17/20 22:59	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/17/20 22:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/17/20 22:59	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/17/20 22:59	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/17/20 22:59	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/17/20 22:59	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/17/20 22:59	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/17/20 22:59	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/17/20 22:59	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/17/20 22:59	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/17/20 22:59	1
Acetone	**6.7**		5.0	5.4	ug/L			08/18/20 21:42	1
Benzene	1.0	U	1.0	0.38	ug/L			08/17/20 22:59	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/17/20 22:59	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/17/20 22:59	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/17/20 22:59	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/17/20 22:59	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/17/20 22:59	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/17/20 22:59	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/17/20 22:59	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/17/20 22:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/17/20 22:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/17/20 22:59	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/17/20 22:59	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/17/20 22:59	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/17/20 22:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/17/20 22:59	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/17/20 22:59	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/17/20 22:59	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/17/20 22:59	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/17/20 22:59	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/17/20 22:59	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/17/20 22:59	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 22:59	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/17/20 22:59	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/17/20 22:59	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/17/20 22:59	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/17/20 22:59	1

Client Sample ID: MSA-SW37B-081220

Lab Sample ID: 240-134931-2

Date Collected: 08/12/20 10:21
Date Received: 08/13/20 10:30

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/17/20 22:59	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/17/20 22:59	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/17/20 22:59	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/17/20 22:59	1
Styrene	1.0	U	1.0	0.40	ug/L			08/17/20 22:59	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/17/20 22:59	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/17/20 22:59	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/17/20 22:59	1
Toluene	1.0	U	1.0	0.35	ug/L			08/17/20 22:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/17/20 22:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/17/20 22:59	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/17/20 22:59	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/17/20 22:59	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/17/20 22:59	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/17/20 22:59	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/17/20 22:59	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/17/20 22:59	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/17/20 22:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/17/20 22:59*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 21:42*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/17/20 22:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/17/20 22:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/18/20 21:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/17/20 22:59*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*08/18/20 21:42*	*1*
Toluene-d8 (Surr)	*107*		*69 - 122*		*08/17/20 22:59*	*1*
Toluene-d8 (Surr)	*108*		*69 - 122*		*08/18/20 21:42*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/17/20 22:59*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/18/20 21:42*	*1*

Client Sample ID: MSA-SW37C-081220

Lab Sample ID: 240-134931-3

Date Collected: 08/12/20 10:23
Date Received: 08/13/20 10:30

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 23:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/17/20 23:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/17/20 23:22	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/17/20 23:22	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 23:22	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/17/20 23:22	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/17/20 23:22	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/17/20 23:22	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/17/20 23:22	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/17/20 23:22	1

Client Sample ID: MSA-SW37C-081220

Date Collected: 08/12/20 10:23
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/17/20 23:22	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 23:22	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/17/20 23:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/17/20 23:22	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/17/20 23:22	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/17/20 23:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/17/20 23:22	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/17/20 23:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/17/20 23:22	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/17/20 23:22	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/17/20 23:22	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/17/20 23:22	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/17/20 23:22	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/17/20 23:22	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/17/20 23:22	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/17/20 23:22	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/17/20 23:22	1
Acetone	**6.6**		5.0	5.4	ug/L			08/18/20 22:04	1
Benzene	1.0	U	1.0	0.38	ug/L			08/17/20 23:22	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/17/20 23:22	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/17/20 23:22	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/17/20 23:22	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/17/20 23:22	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/17/20 23:22	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/17/20 23:22	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/17/20 23:22	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/17/20 23:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/17/20 23:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/17/20 23:22	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/17/20 23:22	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/17/20 23:22	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/17/20 23:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/17/20 23:22	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/17/20 23:22	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/17/20 23:22	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/17/20 23:22	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/17/20 23:22	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/17/20 23:22	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/17/20 23:22	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 23:22	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/17/20 23:22	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/17/20 23:22	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/17/20 23:22	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/17/20 23:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/17/20 23:22	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/17/20 23:22	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/17/20 23:22	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/17/20 23:22	1
Styrene	1.0	U	1.0	0.40	ug/L			08/17/20 23:22	1

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Date Collected: 08/12/20 10:23 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/17/20 23:22	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/17/20 23:22	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/17/20 23:22	1
Toluene	1.0	U	1.0	0.35	ug/L			08/17/20 23:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/17/20 23:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/17/20 23:22	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/17/20 23:22	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/17/20 23:22	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/17/20 23:22	1
Vinyl chloride	**0.61**		0.50	0.50	ug/L			08/17/20 23:22	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/17/20 23:22	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/17/20 23:22	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/17/20 23:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/17/20 23:22*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 22:04*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/17/20 23:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/17/20 23:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/18/20 22:04*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*08/17/20 23:22*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/18/20 22:04*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/17/20 23:22*	*1*
Toluene-d8 (Surr)	*104*		*69 - 122*		*08/18/20 22:04*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/17/20 23:22*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/18/20 22:04*	*1*

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Date Collected: 08/12/20 10:25 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 23:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/17/20 23:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/17/20 23:44	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/17/20 23:44	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 23:44	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/17/20 23:44	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/17/20 23:44	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/17/20 23:44	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/17/20 23:44	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/17/20 23:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/17/20 23:44	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 23:44	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/17/20 23:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/17/20 23:44	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/17/20 23:44	1

Client Sample ID: MSA-SW37D-081220

Date Collected: 08/12/20 10:25
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/17/20 23:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/17/20 23:44	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/17/20 23:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/17/20 23:44	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/17/20 23:44	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/17/20 23:44	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/17/20 23:44	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/17/20 23:44	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/17/20 23:44	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/17/20 23:44	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/17/20 23:44	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/17/20 23:44	1
Acetone	**6.4**		5.0	5.4	ug/L			08/18/20 22:27	1
Benzene	1.0	U	1.0	0.38	ug/L			08/17/20 23:44	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/17/20 23:44	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/17/20 23:44	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/17/20 23:44	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/17/20 23:44	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/17/20 23:44	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/17/20 23:44	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/17/20 23:44	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/17/20 23:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/17/20 23:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/17/20 23:44	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/17/20 23:44	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/17/20 23:44	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/17/20 23:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/17/20 23:44	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/17/20 23:44	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/17/20 23:44	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/17/20 23:44	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/17/20 23:44	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/17/20 23:44	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/17/20 23:44	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 23:44	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/17/20 23:44	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/17/20 23:44	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/17/20 23:44	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/17/20 23:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/17/20 23:44	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/17/20 23:44	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/17/20 23:44	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/17/20 23:44	1
Styrene	1.0	U	1.0	0.40	ug/L			08/17/20 23:44	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/17/20 23:44	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/17/20 23:44	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/17/20 23:44	1
Toluene	1.0	U	1.0	0.35	ug/L			08/17/20 23:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/17/20 23:44	1

Client Sample ID: MSA-SW37D-081220

Lab Sample ID: 240-134931-4

Date Collected: 08/12/20 10:25
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/17/20 23:44	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/17/20 23:44	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/17/20 23:44	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/17/20 23:44	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/17/20 23:44	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/17/20 23:44	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/17/20 23:44	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/17/20 23:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/17/20 23:44*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 22:27*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/17/20 23:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 130*		*08/17/20 23:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 130*		*08/18/20 22:27*	*1*
4-Bromofluorobenzene (Surr)	*91*		*47 - 134*		*08/17/20 23:44*	*1*
4-Bromofluorobenzene (Surr)	*88*		*47 - 134*		*08/18/20 22:27*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/17/20 23:44*	*1*
Toluene-d8 (Surr)	*101*		*69 - 122*		*08/18/20 22:27*	*1*
Dibromofluoromethane (Surr)	*102*		*78 - 129*		*08/17/20 23:44*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*08/18/20 22:27*	*1*

Client Sample ID: MSA-SW38A-081220

Lab Sample ID: 240-134931-5

Date Collected: 08/12/20 09:33
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 00:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 00:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 00:06	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 00:06	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 00:06	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 00:06	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 00:06	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 00:06	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 00:06	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 00:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 00:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 00:06	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 00:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 00:06	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 00:06	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 00:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 00:06	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 00:06	1
1,4-Dichlorobenzene	**0.46**	**J**	1.0	0.37	ug/L			08/18/20 00:06	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 00:06	1

Client Sample ID: MSA-SW38A-081220

Date Collected: 08/12/20 09:33
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 00:06	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 00:06	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 00:06	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 00:06	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 00:06	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 00:06	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 00:06	1
Acetone	**9.3**		5.0	5.4	ug/L			08/18/20 22:49	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 00:06	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 00:06	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 00:06	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 00:06	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 00:06	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 00:06	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 00:06	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 00:06	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 00:06	1
cis-1,2-Dichloroethene	**0.62**	**J**	1.0	0.38	ug/L			08/18/20 00:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 00:06	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 00:06	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 00:06	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 00:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 00:06	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 00:06	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 00:06	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 00:06	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 00:06	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 00:06	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 00:06	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 00:06	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 00:06	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 00:06	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 00:06	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 00:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 00:06	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 00:06	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 00:06	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 00:06	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 00:06	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 00:06	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 00:06	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 00:06	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 00:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 00:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 00:06	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 00:06	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 00:06	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 00:06	1
Vinyl chloride	**0.51**		0.50	0.50	ug/L			08/18/20 00:06	1

Client Sample ID: MSA-SW38A-081220

Lab Sample ID: 240-134931-5

Date Collected: 08/12/20 09:33
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 00:06	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 00:06	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 00:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 00:06*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 22:49*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 00:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*		*08/18/20 00:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/18/20 22:49*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/18/20 00:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*08/18/20 22:49*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 00:06*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 22:49*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/18/20 00:06*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/18/20 22:49*	*1*

Client Sample ID: MSA-SW38B-081220

Lab Sample ID: 240-134931-6

Date Collected: 08/12/20 09:36
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 00:29	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 00:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 00:29	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 00:29	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 00:29	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 00:29	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 00:29	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 00:29	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 00:29	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 00:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 00:29	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 00:29	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 00:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 00:29	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 00:29	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 00:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 00:29	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 00:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 00:29	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 00:29	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 00:29	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 00:29	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 00:29	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 00:29	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 00:29	1

Client Sample ID: MSA-SW38B-081220

Date Collected: 08/12/20 09:36
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 00:29	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 00:29	1
Acetone	**8.4**		5.0	5.4	ug/L			08/18/20 23:12	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 00:29	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 00:29	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 00:29	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 00:29	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 00:29	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 00:29	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 00:29	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 00:29	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 00:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 00:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 00:29	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 00:29	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 00:29	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 00:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 00:29	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 00:29	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 00:29	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 00:29	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 00:29	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 00:29	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 00:29	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 00:29	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 00:29	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 00:29	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 00:29	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 00:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 00:29	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 00:29	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 00:29	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 00:29	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 00:29	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 00:29	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 00:29	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 00:29	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 00:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 00:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 00:29	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 00:29	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 00:29	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 00:29	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 00:29	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 00:29	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 00:29	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 00:29	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 00:29*	*1*

Client Sample ID: MSA-SW38B-081220

Lab Sample ID: 240-134931-6

Date Collected: 08/12/20 09:36
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/18/20 23:12	1
Chlorodifluoromethane TIC	1.0	U	ug/L			75-45-6		08/18/20 00:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 130		08/18/20 00:29	1
1,2-Dichloroethane-d4 (Surr)	106		75 - 130		08/18/20 23:12	1
4-Bromofluorobenzene (Surr)	93		47 - 134		08/18/20 00:29	1
4-Bromofluorobenzene (Surr)	93		47 - 134		08/18/20 23:12	1
Toluene-d8 (Surr)	103		69 - 122		08/18/20 00:29	1
Toluene-d8 (Surr)	107		69 - 122		08/18/20 23:12	1
Dibromofluoromethane (Surr)	104		78 - 129		08/18/20 00:29	1
Dibromofluoromethane (Surr)	108		78 - 129		08/18/20 23:12	1

Client Sample ID: MSA-SW38C-081220

Lab Sample ID: 240-134931-7

Date Collected: 08/12/20 09:39
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 00:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 00:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 00:51	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 00:51	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 00:51	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 00:51	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 00:51	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 00:51	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 00:51	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 00:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 00:51	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 00:51	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 00:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 00:51	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 00:51	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 00:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 00:51	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 00:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 00:51	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 00:51	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 00:51	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 00:51	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 00:51	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 00:51	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 00:51	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 00:51	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 00:51	1
Acetone	5.0	U	5.0	5.4	ug/L			08/18/20 00:51	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 00:51	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 00:51	1

Client Sample ID: MSA-SW38C-081220

Date Collected: 08/12/20 09:39
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 00:51	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 00:51	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 00:51	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 00:51	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 00:51	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 00:51	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 00:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 00:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 00:51	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 00:51	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 00:51	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 00:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 00:51	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 00:51	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 00:51	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 00:51	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 00:51	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 00:51	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 00:51	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 00:51	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 00:51	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 00:51	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 00:51	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 00:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 00:51	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 00:51	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 00:51	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 00:51	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 00:51	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 00:51	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 00:51	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 00:51	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 00:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 00:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 00:51	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 00:51	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 00:51	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 00:51	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 00:51	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 00:51	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 00:51	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 00:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 00:51*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 00:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/18/20 00:51*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*08/18/20 00:51*	*1*

Client Sample ID: MSA-SW38C-081220

Lab Sample ID: 240-134931-7

Date Collected: 08/12/20 09:39
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 00:51*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/18/20 00:51*	*1*

Client Sample ID: MSA-SW38D-081220

Lab Sample ID: 240-134931-8

Date Collected: 08/12/20 09:41
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 01:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 01:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 01:14	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 01:14	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 01:14	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 01:14	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 01:14	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 01:14	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 01:14	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 01:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 01:14	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 01:14	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 01:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 01:14	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 01:14	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 01:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 01:14	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 01:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 01:14	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 01:14	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 01:14	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 01:14	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 01:14	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 01:14	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 01:14	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 01:14	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 01:14	1
Acetone	**6.7**		5.0	5.4	ug/L			08/18/20 23:34	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 01:14	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 01:14	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 01:14	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 01:14	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 01:14	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 01:14	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 01:14	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 01:14	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 01:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 01:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 01:14	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 01:14	1

Client Sample ID: MSA-SW38D-081220

Date Collected: 08/12/20 09:41
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 01:14	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 01:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 01:14	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 01:14	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 01:14	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 01:14	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 01:14	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 01:14	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 01:14	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 01:14	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 01:14	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 01:14	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 01:14	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 01:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 01:14	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 01:14	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 01:14	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 01:14	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 01:14	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 01:14	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 01:14	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 01:14	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 01:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 01:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 01:14	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 01:14	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 01:14	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 01:14	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 01:14	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 01:14	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 01:14	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 01:14	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 01:14*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 23:34*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 01:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/18/20 01:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/18/20 23:34*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*08/18/20 01:14*	*1*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*		*08/18/20 23:34*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 01:14*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/18/20 23:34*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/18/20 01:14*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/18/20 23:34*	*1*

Client Sample ID: MSA-SW40A-081220

Date Collected: 08/12/20 09:51
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 01:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 01:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 01:36	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 01:36	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 01:36	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 01:36	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 01:36	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 01:36	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 01:36	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 01:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 01:36	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 01:36	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 01:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 01:36	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 01:36	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 01:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 01:36	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 01:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 01:36	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 01:36	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 01:36	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 01:36	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 01:36	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 01:36	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 01:36	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 01:36	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 01:36	1
Acetone	**10**		5.0	5.4	ug/L			08/18/20 23:56	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 01:36	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 01:36	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 01:36	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 01:36	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 01:36	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 01:36	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 01:36	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 01:36	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 01:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 01:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 01:36	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 01:36	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 01:36	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 01:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 01:36	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 01:36	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 01:36	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 01:36	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 01:36	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 01:36	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 01:36	1

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Date Collected: 08/12/20 09:51 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 01:36	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 01:36	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 01:36	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 01:36	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 01:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 01:36	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 01:36	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 01:36	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 01:36	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 01:36	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 01:36	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 01:36	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 01:36	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 01:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 01:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 01:36	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 01:36	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 01:36	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 01:36	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 01:36	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 01:36	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 01:36	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 01:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 01:36*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 23:56*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 01:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/18/20 01:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*		*08/18/20 23:56*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/18/20 01:36*	*1*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*		*08/18/20 23:56*	*1*
Toluene-d8 (Surr)	*104*		*69 - 122*		*08/18/20 01:36*	*1*
Toluene-d8 (Surr)	*102*		*69 - 122*		*08/18/20 23:56*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*08/18/20 01:36*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*08/18/20 23:56*	*1*

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Date Collected: 08/12/20 09:53 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 01:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 01:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 01:59	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 01:59	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 01:59	1

Client Sample ID: MSA-SW40B-081220

Date Collected: 08/12/20 09:53
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 01:59	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 01:59	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 01:59	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 01:59	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 01:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 01:59	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 01:59	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 01:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 01:59	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 01:59	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 01:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 01:59	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 01:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 01:59	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 01:59	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 01:59	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 01:59	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 01:59	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 01:59	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 01:59	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 01:59	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 01:59	1
Acetone	**7.2**		5.0	5.4	ug/L			08/19/20 00:18	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 01:59	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 01:59	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 01:59	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 01:59	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 01:59	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 01:59	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 01:59	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 01:59	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 01:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 01:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 01:59	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 01:59	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 01:59	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 01:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 01:59	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 01:59	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 01:59	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 01:59	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 01:59	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 01:59	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 01:59	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 01:59	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 01:59	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 01:59	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 01:59	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 01:59	1

Client Sample ID: MSA-SW40B-081220

Lab Sample ID: 240-134931-10

Date Collected: 08/12/20 09:53
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 01:59	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 01:59	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 01:59	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 01:59	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 01:59	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 01:59	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 01:59	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 01:59	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 01:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 01:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 01:59	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 01:59	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 01:59	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 01:59	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 01:59	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 01:59	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 01:59	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 01:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 01:59*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 00:18*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 01:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/18/20 01:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*		*08/19/20 00:18*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/18/20 01:59*	*1*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*		*08/19/20 00:18*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/18/20 01:59*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/19/20 00:18*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/18/20 01:59*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/19/20 00:18*	*1*

Client Sample ID: MSA-SW40C-081220

Lab Sample ID: 240-134931-11

Date Collected: 08/12/20 09:56
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 02:55	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/19/20 02:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/19/20 02:55	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/19/20 02:55	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 02:55	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/19/20 02:55	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/19/20 02:55	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/19/20 02:55	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/19/20 02:55	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/19/20 02:55	1

Client Sample ID: MSA-SW40C-081220

Date Collected: 08/12/20 09:56
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/19/20 02:55	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 02:55	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/19/20 02:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/19/20 02:55	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/19/20 02:55	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/19/20 02:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/19/20 02:55	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/19/20 02:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/19/20 02:55	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/19/20 02:55	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/19/20 02:55	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/19/20 02:55	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/19/20 02:55	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/19/20 02:55	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/19/20 02:55	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/19/20 02:55	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/19/20 02:55	1
Acetone	**8.0**		5.0	5.4	ug/L			08/19/20 02:55	1
Benzene	1.0	U	1.0	0.38	ug/L			08/19/20 02:55	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/19/20 02:55	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/19/20 02:55	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/19/20 02:55	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/19/20 02:55	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/19/20 02:55	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/19/20 02:55	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/19/20 02:55	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/19/20 02:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/19/20 02:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/19/20 02:55	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/19/20 02:55	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/19/20 02:55	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/19/20 02:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/19/20 02:55	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/19/20 02:55	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/19/20 02:55	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/19/20 02:55	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/19/20 02:55	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/19/20 02:55	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/19/20 02:55	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 02:55	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/19/20 02:55	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/19/20 02:55	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/19/20 02:55	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/19/20 02:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/19/20 02:55	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/19/20 02:55	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/19/20 02:55	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/19/20 02:55	1
Styrene	1.0	U	1.0	0.40	ug/L			08/19/20 02:55	1

Client Sample ID: MSA-SW40C-081220

Lab Sample ID: 240-134931-11

Date Collected: 08/12/20 09:56
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/19/20 02:55	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/19/20 02:55	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/19/20 02:55	1
Toluene	1.0	U	1.0	0.35	ug/L			08/19/20 02:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/19/20 02:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/19/20 02:55	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/19/20 02:55	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/19/20 02:55	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/19/20 02:55	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/19/20 02:55	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/19/20 02:55	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/19/20 02:55	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/19/20 02:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 02:55*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/19/20 02:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/19/20 02:55*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/19/20 02:55*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/19/20 02:55*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/19/20 02:55*	*1*

Client Sample ID: MSA-SW40D-081220

Lab Sample ID: 240-134931-12

Date Collected: 08/12/20 00:09
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 03:18	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/19/20 03:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/19/20 03:18	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/19/20 03:18	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 03:18	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/19/20 03:18	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/19/20 03:18	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/19/20 03:18	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/19/20 03:18	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/19/20 03:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/19/20 03:18	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 03:18	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/19/20 03:18	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/19/20 03:18	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/19/20 03:18	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/19/20 03:18	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/19/20 03:18	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/19/20 03:18	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/19/20 03:18	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/19/20 03:18	1

Client Sample ID: MSA-SW40D-081220
Lab Sample ID: 240-134931-12

Date Collected: 08/12/20 00:09
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/19/20 03:18	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/19/20 03:18	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/19/20 03:18	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/19/20 03:18	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/19/20 03:18	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/19/20 03:18	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/19/20 03:18	1
Acetone	**5.7**		5.0	5.4	ug/L			08/19/20 03:18	1
Benzene	1.0	U	1.0	0.38	ug/L			08/19/20 03:18	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/19/20 03:18	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/19/20 03:18	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/19/20 03:18	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/19/20 03:18	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/19/20 03:18	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/19/20 03:18	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/19/20 03:18	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/19/20 03:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/19/20 03:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/19/20 03:18	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/19/20 03:18	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/19/20 03:18	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/19/20 03:18	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/19/20 03:18	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/19/20 03:18	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/19/20 03:18	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/19/20 03:18	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/19/20 03:18	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/19/20 03:18	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/19/20 03:18	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 03:18	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/19/20 03:18	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/19/20 03:18	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/19/20 03:18	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/19/20 03:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/19/20 03:18	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/19/20 03:18	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/19/20 03:18	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/19/20 03:18	1
Styrene	1.0	U	1.0	0.40	ug/L			08/19/20 03:18	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/19/20 03:18	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/19/20 03:18	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/19/20 03:18	1
Toluene	1.0	U	1.0	0.35	ug/L			08/19/20 03:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/19/20 03:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/19/20 03:18	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/19/20 03:18	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/19/20 03:18	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/19/20 03:18	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/19/20 03:18	1

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Date Collected: 08/12/20 00:09 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/19/20 03:18	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/19/20 03:18	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/19/20 03:18	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 03:18*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/19/20 03:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/19/20 03:18*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/19/20 03:18*	*1*
Toluene-d8 (Surr)	*101*		*69 - 122*		*08/19/20 03:18*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*08/19/20 03:18*	*1*

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Date Collected: 08/12/20 09:17 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 03:40	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/19/20 03:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/19/20 03:40	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/19/20 03:40	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 03:40	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/19/20 03:40	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/19/20 03:40	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/19/20 03:40	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/19/20 03:40	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/19/20 03:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/19/20 03:40	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 03:40	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/19/20 03:40	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/19/20 03:40	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/19/20 03:40	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/19/20 03:40	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/19/20 03:40	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/19/20 03:40	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/19/20 03:40	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/19/20 03:40	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/19/20 03:40	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/19/20 03:40	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/19/20 03:40	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/19/20 03:40	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/19/20 03:40	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/19/20 03:40	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/19/20 03:40	1
Acetone	**9.2**		5.0	5.4	ug/L			08/19/20 03:40	1
Benzene	1.0	U	1.0	0.38	ug/L			08/19/20 03:40	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/19/20 03:40	1

Client Sample ID: MSA-SW41A-081220

Date Collected: 08/12/20 09:17
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-13

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.42	ug/L			08/19/20 03:40	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/19/20 03:40	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/19/20 03:40	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/19/20 03:40	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/19/20 03:40	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/19/20 03:40	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/19/20 03:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/19/20 03:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/19/20 03:40	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/19/20 03:40	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/19/20 03:40	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/19/20 03:40	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/19/20 03:40	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/19/20 03:40	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/19/20 03:40	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/19/20 03:40	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/19/20 03:40	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/19/20 03:40	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/19/20 03:40	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 03:40	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/19/20 03:40	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/19/20 03:40	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/19/20 03:40	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/19/20 03:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/19/20 03:40	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/19/20 03:40	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/19/20 03:40	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/19/20 03:40	1
Styrene	1.0	U	1.0	0.40	ug/L			08/19/20 03:40	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/19/20 03:40	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/19/20 03:40	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/19/20 03:40	1
Toluene	1.0	U	1.0	0.35	ug/L			08/19/20 03:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/19/20 03:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/19/20 03:40	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/19/20 03:40	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/19/20 03:40	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/19/20 03:40	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/19/20 03:40	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/19/20 03:40	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/19/20 03:40	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/19/20 03:40	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 03:40*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/19/20 03:40*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/19/20 03:40*	*1*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*		*08/19/20 03:40*	*1*

Client Sample ID: MSA-SW41A-081220

Lab Sample ID: 240-134931-13

Date Collected: 08/12/20 09:17
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/19/20 03:40*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*08/19/20 03:40*	*1*

Client Sample ID: MSA-SW41B-081220

Lab Sample ID: 240-134931-14

Date Collected: 08/12/20 09:20
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 04:02	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/19/20 04:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/19/20 04:02	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/19/20 04:02	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 04:02	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/19/20 04:02	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/19/20 04:02	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/19/20 04:02	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/19/20 04:02	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/19/20 04:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/19/20 04:02	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 04:02	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/19/20 04:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/19/20 04:02	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/19/20 04:02	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/19/20 04:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/19/20 04:02	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/19/20 04:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/19/20 04:02	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/19/20 04:02	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/19/20 04:02	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/19/20 04:02	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/19/20 04:02	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/19/20 04:02	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/19/20 04:02	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/19/20 04:02	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/19/20 04:02	1
Acetone	**8.7**		5.0	5.4	ug/L			08/19/20 04:02	1
Benzene	1.0	U	1.0	0.38	ug/L			08/19/20 04:02	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/19/20 04:02	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/19/20 04:02	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/19/20 04:02	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/19/20 04:02	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/19/20 04:02	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/19/20 04:02	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/19/20 04:02	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/19/20 04:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/19/20 04:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/19/20 04:02	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/19/20 04:02	1

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Date Collected: 08/12/20 09:20 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/19/20 04:02	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/19/20 04:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/19/20 04:02	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/19/20 04:02	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/19/20 04:02	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/19/20 04:02	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/19/20 04:02	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/19/20 04:02	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/19/20 04:02	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 04:02	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/19/20 04:02	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/19/20 04:02	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/19/20 04:02	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/19/20 04:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/19/20 04:02	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/19/20 04:02	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/19/20 04:02	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/19/20 04:02	1
Styrene	1.0	U	1.0	0.40	ug/L			08/19/20 04:02	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/19/20 04:02	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/19/20 04:02	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/19/20 04:02	1
Toluene	1.0	U	1.0	0.35	ug/L			08/19/20 04:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/19/20 04:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/19/20 04:02	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/19/20 04:02	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/19/20 04:02	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/19/20 04:02	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/19/20 04:02	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/19/20 04:02	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/19/20 04:02	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/19/20 04:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 04:02*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/19/20 04:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/19/20 04:02*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/19/20 04:02*	*1*
Toluene-d8 (Surr)	*107*		*69 - 122*		*08/19/20 04:02*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/19/20 04:02*	*1*

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Date Collected: 08/12/20 09:22 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 04:24	1

Client Sample ID: MSA-SW41C-081220
Lab Sample ID: 240-134931-15

Date Collected: 08/12/20 09:22
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/19/20 04:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/19/20 04:24	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/19/20 04:24	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 04:24	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/19/20 04:24	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/19/20 04:24	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/19/20 04:24	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/19/20 04:24	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/19/20 04:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/19/20 04:24	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 04:24	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/19/20 04:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/19/20 04:24	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/19/20 04:24	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/19/20 04:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/19/20 04:24	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/19/20 04:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/19/20 04:24	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/19/20 04:24	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/19/20 04:24	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/19/20 04:24	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/19/20 04:24	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/19/20 04:24	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/19/20 04:24	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/19/20 04:24	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/19/20 04:24	1
Acetone	**7.1**		5.0	5.4	ug/L			08/19/20 04:24	1
Benzene	1.0	U	1.0	0.38	ug/L			08/19/20 04:24	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/19/20 04:24	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/19/20 04:24	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/19/20 04:24	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/19/20 04:24	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/19/20 04:24	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/19/20 04:24	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/19/20 04:24	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/19/20 04:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/19/20 04:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/19/20 04:24	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/19/20 04:24	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/19/20 04:24	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/19/20 04:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/19/20 04:24	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/19/20 04:24	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/19/20 04:24	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/19/20 04:24	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/19/20 04:24	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/19/20 04:24	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/19/20 04:24	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 04:24	1

Client Sample ID: MSA-SW41C-081220

Lab Sample ID: 240-134931-15

Date Collected: 08/12/20 09:22
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/19/20 04:24	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/19/20 04:24	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/19/20 04:24	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/19/20 04:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/19/20 04:24	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/19/20 04:24	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/19/20 04:24	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/19/20 04:24	1
Styrene	1.0	U	1.0	0.40	ug/L			08/19/20 04:24	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/19/20 04:24	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/19/20 04:24	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/19/20 04:24	1
Toluene	1.0	U	1.0	0.35	ug/L			08/19/20 04:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/19/20 04:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/19/20 04:24	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/19/20 04:24	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/19/20 04:24	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/19/20 04:24	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/19/20 04:24	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/19/20 04:24	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/19/20 04:24	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/19/20 04:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 04:24*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/19/20 04:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/19/20 04:24*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/19/20 04:24*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/19/20 04:24*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/19/20 04:24*	*1*

Client Sample ID: MSA-SW41D-081220

Lab Sample ID: 240-134931-16

Date Collected: 08/12/20 09:25
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/20/20 02:37	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/20/20 02:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/20/20 02:37	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/20/20 02:37	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/20/20 02:37	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/20/20 02:37	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/20/20 02:37	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/20/20 02:37	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/20/20 02:37	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/20/20 02:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/20/20 02:37	1

Client Sample ID: MSA-SW41D-081220

Date Collected: 08/12/20 09:25
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-16

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/20/20 02:37	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/20/20 02:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/20/20 02:37	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/20/20 02:37	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/20/20 02:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/20/20 02:37	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/20/20 02:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/20/20 02:37	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/20/20 02:37	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/20/20 02:37	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/20/20 02:37	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/20/20 02:37	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/20/20 02:37	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/20/20 02:37	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/20/20 02:37	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/20/20 02:37	1
Acetone	5.0	U	5.0	5.4	ug/L			08/20/20 02:37	1
Benzene	1.0	U	1.0	0.38	ug/L			08/20/20 02:37	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/20/20 02:37	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/20/20 02:37	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/20/20 02:37	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/20/20 02:37	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/20/20 02:37	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/20/20 02:37	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/20/20 02:37	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/20/20 02:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/20/20 02:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/20/20 02:37	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/20/20 02:37	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/20/20 02:37	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/20/20 02:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/20/20 02:37	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/20/20 02:37	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/20/20 02:37	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/20/20 02:37	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/20/20 02:37	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/20/20 02:37	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/20/20 02:37	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/20/20 02:37	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/20/20 02:37	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/20/20 02:37	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/20/20 02:37	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/20/20 02:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/20/20 02:37	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/20/20 02:37	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/20/20 02:37	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/20/20 02:37	1
Styrene	1.0	U	1.0	0.40	ug/L			08/20/20 02:37	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/20/20 02:37	1

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Date Collected: 08/12/20 09:25 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/20/20 02:37	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/20/20 02:37	1
Toluene	1.0	U	1.0	0.35	ug/L			08/20/20 02:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/20/20 02:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/20/20 02:37	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/20/20 02:37	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/20/20 02:37	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/20/20 02:37	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/20/20 02:37	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/20/20 02:37	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/20/20 02:37	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/20/20 02:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*8.7*	*T J*	*ug/L*		*10.20*			*08/20/20 02:37*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/20/20 02:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 130*		*08/20/20 02:37*	*1*
4-Bromofluorobenzene (Surr)	*110*		*47 - 134*		*08/20/20 02:37*	*1*
Toluene-d8 (Surr)	*102*		*69 - 122*		*08/20/20 02:37*	*1*
Dibromofluoromethane (Surr)	*89*		*78 - 129*		*08/20/20 02:37*	*1*

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Date Collected: 08/12/20 10:06 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/20/20 03:00	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/20/20 03:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/20/20 03:00	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/20/20 03:00	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/20/20 03:00	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/20/20 03:00	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/20/20 03:00	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/20/20 03:00	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/20/20 03:00	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/20/20 03:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/20/20 03:00	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/20/20 03:00	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/20/20 03:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/20/20 03:00	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/20/20 03:00	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/20/20 03:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/20/20 03:00	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/20/20 03:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/20/20 03:00	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/20/20 03:00	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/20/20 03:00	1

Client Sample ID: MSA-SW42A-081220

Date Collected: 08/12/20 10:06
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-17

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/20/20 03:00	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/20/20 03:00	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/20/20 03:00	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/20/20 03:00	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/20/20 03:00	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/20/20 03:00	1
Acetone	**11**		5.0	5.4	ug/L			08/20/20 03:00	1
Benzene	1.0	U	1.0	0.38	ug/L			08/20/20 03:00	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/20/20 03:00	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/20/20 03:00	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/20/20 03:00	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/20/20 03:00	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/20/20 03:00	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/20/20 03:00	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/20/20 03:00	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/20/20 03:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/20/20 03:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/20/20 03:00	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/20/20 03:00	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/20/20 03:00	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/20/20 03:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/20/20 03:00	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/20/20 03:00	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/20/20 03:00	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/20/20 03:00	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/20/20 03:00	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/20/20 03:00	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/20/20 03:00	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/20/20 03:00	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/20/20 03:00	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/20/20 03:00	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/20/20 03:00	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/20/20 03:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/20/20 03:00	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/20/20 03:00	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/20/20 03:00	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/20/20 03:00	1
Styrene	1.0	U	1.0	0.40	ug/L			08/20/20 03:00	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/20/20 03:00	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/20/20 03:00	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/20/20 03:00	1
Toluene	1.0	U	1.0	0.35	ug/L			08/20/20 03:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/20/20 03:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/20/20 03:00	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/20/20 03:00	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/20/20 03:00	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/20/20 03:00	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/20/20 03:00	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/20/20 03:00	1

Client Sample ID: MSA-SW42A-081220

Lab Sample ID: 240-134931-17

Date Collected: 08/12/20 10:06
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/20/20 03:00	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/20/20 03:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/20/20 03:00*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/20/20 03:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*		*08/20/20 03:00*	*1*
4-Bromofluorobenzene (Surr)	*106*		*47 - 134*		*08/20/20 03:00*	*1*
Toluene-d8 (Surr)	*101*		*69 - 122*		*08/20/20 03:00*	*1*
Dibromofluoromethane (Surr)	*89*		*78 - 129*		*08/20/20 03:00*	*1*

Client Sample ID: MSA-SW42B-081220

Lab Sample ID: 240-134931-18

Date Collected: 08/12/20 10:08
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 02:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 02:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 02:21	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 02:21	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 02:21	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 02:21	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 02:21	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 02:21	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 02:21	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 02:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 02:21	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 02:21	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 02:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 02:21	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 02:21	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 02:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 02:21	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 02:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 02:21	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 02:21	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 02:21	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 02:21	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 02:21	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 02:21	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 02:21	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 02:21	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 02:21	1
Acetone	**8.1**		5.0	5.4	ug/L			08/19/20 00:41	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 02:21	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 02:21	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 02:21	1

Client Sample ID: MSA-SW42B-081220

Date Collected: 08/12/20 10:08
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-18

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 02:21	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 02:21	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 02:21	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 02:21	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 02:21	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 02:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 02:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 02:21	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 02:21	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 02:21	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 02:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 02:21	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 02:21	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 02:21	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 02:21	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 02:21	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 02:21	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 02:21	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 02:21	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 02:21	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 02:21	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 02:21	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 02:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 02:21	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 02:21	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 02:21	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 02:21	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 02:21	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 02:21	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 02:21	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 02:21	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 02:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 02:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 02:21	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 02:21	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 02:21	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 02:21	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 02:21	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 02:21	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 02:21	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 02:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 02:21*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 00:41*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 02:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/18/20 02:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/19/20 00:41*	*1*

Client Sample ID: MSA-SW42B-081220
Lab Sample ID: 240-134931-18

Date Collected: 08/12/20 10:08
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*08/18/20 02:21*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/19/20 00:41*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 02:21*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/19/20 00:41*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/18/20 02:21*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/19/20 00:41*	*1*

Client Sample ID: MSA-SW42C-081220
Lab Sample ID: 240-134931-19

Date Collected: 08/12/20 10:10
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 02:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 02:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 02:44	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 02:44	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 02:44	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 02:44	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 02:44	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 02:44	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 02:44	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 02:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 02:44	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 02:44	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 02:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 02:44	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 02:44	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 02:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 02:44	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 02:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 02:44	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 02:44	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 02:44	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 02:44	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 02:44	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 02:44	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 02:44	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 02:44	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 02:44	1
Acetone	**7.6**		5.0	5.4	ug/L			08/19/20 01:03	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 02:44	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 02:44	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 02:44	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 02:44	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 02:44	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 02:44	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 02:44	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 02:44	1

Client Sample ID: MSA-SW42C-081220

Date Collected: 08/12/20 10:10
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-19

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 02:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 02:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 02:44	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 02:44	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 02:44	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 02:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 02:44	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 02:44	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 02:44	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 02:44	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 02:44	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 02:44	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 02:44	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 02:44	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 02:44	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 02:44	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 02:44	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 02:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 02:44	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 02:44	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 02:44	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 02:44	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 02:44	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 02:44	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 02:44	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 02:44	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 02:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 02:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 02:44	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 02:44	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 02:44	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 02:44	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 02:44	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 02:44	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 02:44	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 02:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 02:44*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 01:03*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 02:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*		*08/18/20 02:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/19/20 01:03*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/18/20 02:44*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/19/20 01:03*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/18/20 02:44*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/19/20 01:03*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*08/18/20 02:44*	*1*

Client Sample ID: MSA-SW42C-081220

Lab Sample ID: 240-134931-19

Date Collected: 08/12/20 10:10
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/19/20 01:03*	*1*

Client Sample ID: MSA-SW42D-081220

Lab Sample ID: 240-134931-20

Date Collected: 08/12/20 10:13
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/14/20 23:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/14/20 23:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/14/20 23:20	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/14/20 23:20	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/14/20 23:20	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/14/20 23:20	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/14/20 23:20	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/14/20 23:20	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/14/20 23:20	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/14/20 23:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/14/20 23:20	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/14/20 23:20	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/14/20 23:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/14/20 23:20	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/14/20 23:20	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/14/20 23:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/14/20 23:20	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/14/20 23:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/14/20 23:20	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/14/20 23:20	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/14/20 23:20	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/14/20 23:20	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/14/20 23:20	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/14/20 23:20	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/14/20 23:20	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/14/20 23:20	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/14/20 23:20	1
Acetone	5.0	U	5.0	5.4	ug/L			08/14/20 23:20	1
Benzene	1.0	U	1.0	0.38	ug/L			08/14/20 23:20	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/14/20 23:20	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/14/20 23:20	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/14/20 23:20	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/14/20 23:20	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/14/20 23:20	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/14/20 23:20	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/14/20 23:20	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/14/20 23:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/14/20 23:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/14/20 23:20	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/14/20 23:20	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/14/20 23:20	1

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Date Collected: 08/12/20 10:13 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/14/20 23:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/14/20 23:20	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/14/20 23:20	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/14/20 23:20	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/14/20 23:20	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/14/20 23:20	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/14/20 23:20	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/14/20 23:20	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/14/20 23:20	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/14/20 23:20	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/14/20 23:20	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/14/20 23:20	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/14/20 23:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/14/20 23:20	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/14/20 23:20	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/14/20 23:20	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/14/20 23:20	1
Styrene	1.0	U	1.0	0.40	ug/L			08/14/20 23:20	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/14/20 23:20	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/14/20 23:20	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/14/20 23:20	1
Toluene	1.0	U	1.0	0.35	ug/L			08/14/20 23:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/14/20 23:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/14/20 23:20	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/14/20 23:20	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/14/20 23:20	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/14/20 23:20	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/14/20 23:20	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/14/20 23:20	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/14/20 23:20	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/14/20 23:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/14/20 23:20*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/14/20 23:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/14/20 23:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/14/20 23:20*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/14/20 23:20*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/14/20 23:20*	*1*

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Date Collected: 08/12/20 09:03 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/14/20 23:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/14/20 23:42	1

Client Sample ID: MSA-SW43A-081220

Date Collected: 08/12/20 09:03
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-21

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/14/20 23:42	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/14/20 23:42	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/14/20 23:42	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/14/20 23:42	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/14/20 23:42	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/14/20 23:42	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/14/20 23:42	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/14/20 23:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/14/20 23:42	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/14/20 23:42	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/14/20 23:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/14/20 23:42	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/14/20 23:42	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/14/20 23:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/14/20 23:42	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/14/20 23:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/14/20 23:42	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/14/20 23:42	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/14/20 23:42	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/14/20 23:42	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/14/20 23:42	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/14/20 23:42	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/14/20 23:42	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/14/20 23:42	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/14/20 23:42	1
Acetone	**10**		5.0	5.4	ug/L			08/14/20 23:42	1
Benzene	1.0	U	1.0	0.38	ug/L			08/14/20 23:42	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/14/20 23:42	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/14/20 23:42	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/14/20 23:42	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/14/20 23:42	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/14/20 23:42	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/14/20 23:42	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/14/20 23:42	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/14/20 23:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/14/20 23:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/14/20 23:42	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/14/20 23:42	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/14/20 23:42	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/14/20 23:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/14/20 23:42	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/14/20 23:42	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/14/20 23:42	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/14/20 23:42	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/14/20 23:42	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/14/20 23:42	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/14/20 23:42	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/14/20 23:42	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/14/20 23:42	1

Client Sample ID: MSA-SW43A-081220

Lab Sample ID: 240-134931-21

Date Collected: 08/12/20 09:03
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	5.0	U	5.0	2.4	ug/L			08/14/20 23:42	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/14/20 23:42	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/14/20 23:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/14/20 23:42	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/14/20 23:42	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/14/20 23:42	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/14/20 23:42	1
Styrene	1.0	U	1.0	0.40	ug/L			08/14/20 23:42	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/14/20 23:42	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/14/20 23:42	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/14/20 23:42	1
Toluene	1.0	U	1.0	0.35	ug/L			08/14/20 23:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/14/20 23:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/14/20 23:42	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/14/20 23:42	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/14/20 23:42	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/14/20 23:42	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/14/20 23:42	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/14/20 23:42	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/14/20 23:42	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/14/20 23:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/14/20 23:42*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/14/20 23:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/14/20 23:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/14/20 23:42*	*1*
Toluene-d8 (Surr)	*104*		*69 - 122*		*08/14/20 23:42*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/14/20 23:42*	*1*

Client Sample ID: MSA-SW43B-081220

Lab Sample ID: 240-134931-22

Date Collected: 08/12/20 09:05
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 00:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 00:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 00:04	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 00:04	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 00:04	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 00:04	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 00:04	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 00:04	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 00:04	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 00:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 00:04	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 00:04	1

Client Sample ID: MSA-SW43B-081220

Date Collected: 08/12/20 09:05
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-22

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 00:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 00:04	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 00:04	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 00:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 00:04	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 00:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 00:04	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 00:04	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 00:04	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 00:04	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 00:04	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 00:04	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 00:04	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 00:04	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 00:04	1
Acetone	**9.1**		5.0	5.4	ug/L			08/15/20 00:04	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 00:04	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 00:04	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 00:04	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 00:04	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 00:04	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 00:04	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 00:04	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 00:04	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 00:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 00:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 00:04	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 00:04	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 00:04	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 00:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 00:04	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 00:04	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 00:04	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 00:04	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 00:04	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 00:04	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 00:04	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 00:04	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 00:04	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 00:04	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 00:04	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 00:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 00:04	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 00:04	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 00:04	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 00:04	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 00:04	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 00:04	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 00:04	1

Client Sample ID: MSA-SW43B-081220

Lab Sample ID: 240-134931-22

Date Collected: 08/12/20 09:05
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 00:04	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 00:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 00:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 00:04	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 00:04	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 00:04	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 00:04	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 00:04	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 00:04	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 00:04	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 00:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 00:04*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 00:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/15/20 00:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/15/20 00:04*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/15/20 00:04*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/15/20 00:04*	*1*

Client Sample ID: MSA-SW43C-081220

Lab Sample ID: 240-134931-23

Date Collected: 08/12/20 09:07
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 00:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 00:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 00:27	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 00:27	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 00:27	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 00:27	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 00:27	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 00:27	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 00:27	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 00:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 00:27	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 00:27	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 00:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 00:27	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 00:27	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 00:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 00:27	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 00:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 00:27	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 00:27	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 00:27	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 00:27	1

Client Sample ID: MSA-SW43C-081220

Date Collected: 08/12/20 09:07
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-23

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 00:27	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 00:27	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 00:27	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 00:27	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 00:27	1
Acetone	**7.1**		5.0	5.4	ug/L			08/15/20 00:27	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 00:27	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 00:27	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 00:27	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 00:27	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 00:27	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 00:27	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 00:27	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 00:27	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 00:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 00:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 00:27	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 00:27	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 00:27	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 00:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 00:27	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 00:27	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 00:27	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 00:27	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 00:27	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 00:27	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 00:27	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 00:27	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 00:27	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 00:27	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 00:27	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 00:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 00:27	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 00:27	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 00:27	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 00:27	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 00:27	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 00:27	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 00:27	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 00:27	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 00:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 00:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 00:27	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 00:27	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 00:27	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 00:27	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 00:27	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 00:27	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 00:27	1

Client Sample ID: MSA-SW43C-081220

Lab Sample ID: 240-134931-23

Date Collected: 08/12/20 09:07
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 00:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 00:27*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 00:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/15/20 00:27*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/15/20 00:27*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/15/20 00:27*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/15/20 00:27*	*1*

Client Sample ID: MSA-SW43D-081220

Lab Sample ID: 240-134931-24

Date Collected: 08/12/20 09:10
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 00:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 00:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 00:49	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 00:49	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 00:49	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 00:49	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 00:49	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 00:49	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 00:49	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 00:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 00:49	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 00:49	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 00:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 00:49	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 00:49	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 00:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 00:49	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 00:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 00:49	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 00:49	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 00:49	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 00:49	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 00:49	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 00:49	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 00:49	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 00:49	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 00:49	1
Acetone	**6.7**		5.0	5.4	ug/L			08/15/20 00:49	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 00:49	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 00:49	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 00:49	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 00:49	1

Client Sample ID: MSA-SW43D-081220

Date Collected: 08/12/20 09:10
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-24

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 00:49	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 00:49	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 00:49	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 00:49	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 00:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 00:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 00:49	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 00:49	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 00:49	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 00:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 00:49	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 00:49	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 00:49	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 00:49	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 00:49	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 00:49	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 00:49	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 00:49	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 00:49	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 00:49	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 00:49	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 00:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 00:49	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 00:49	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 00:49	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 00:49	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 00:49	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 00:49	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 00:49	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 00:49	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 00:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 00:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 00:49	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 00:49	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 00:49	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 00:49	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 00:49	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 00:49	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 00:49	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 00:49	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 00:49*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 00:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/15/20 00:49*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/15/20 00:49*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/15/20 00:49*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*08/15/20 00:49*	*1*

Client Sample ID: MSA-SW44A-081220

Date Collected: 08/12/20 08:47
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-25

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 01:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 01:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 01:12	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 01:12	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 01:12	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 01:12	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 01:12	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 01:12	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 01:12	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 01:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 01:12	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 01:12	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 01:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 01:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 01:12	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 01:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 01:12	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 01:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 01:12	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 01:12	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 01:12	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 01:12	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 01:12	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 01:12	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 01:12	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 01:12	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 01:12	1
Acetone	**10**		5.0	5.4	ug/L			08/15/20 01:12	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 01:12	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 01:12	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 01:12	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 01:12	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 01:12	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 01:12	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 01:12	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 01:12	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 01:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 01:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 01:12	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 01:12	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 01:12	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 01:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 01:12	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 01:12	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 01:12	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 01:12	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 01:12	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 01:12	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 01:12	1

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Date Collected: 08/12/20 08:47 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 01:12	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 01:12	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 01:12	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 01:12	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 01:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 01:12	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 01:12	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 01:12	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 01:12	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 01:12	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 01:12	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 01:12	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 01:12	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 01:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 01:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 01:12	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 01:12	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 01:12	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 01:12	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 01:12	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 01:12	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 01:12	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 01:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 01:12*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 01:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 130*		*08/15/20 01:12*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/15/20 01:12*	*1*
Toluene-d8 (Surr)	*102*		*69 - 122*		*08/15/20 01:12*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 129*		*08/15/20 01:12*	*1*

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Date Collected: 08/12/20 08:51 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 01:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 01:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 01:34	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 01:34	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 01:34	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 01:34	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 01:34	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 01:34	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 01:34	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 01:34	1

Client Sample ID: MSA-SW44B-081220

Date Collected: 08/12/20 08:51
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-26

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 01:34	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 01:34	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 01:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 01:34	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 01:34	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 01:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 01:34	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 01:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 01:34	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 01:34	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 01:34	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 01:34	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 01:34	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 01:34	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 01:34	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 01:34	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 01:34	1
Acetone	**6.6**		5.0	5.4	ug/L			08/15/20 01:34	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 01:34	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 01:34	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 01:34	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 01:34	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 01:34	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 01:34	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 01:34	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 01:34	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 01:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 01:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 01:34	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 01:34	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 01:34	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 01:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 01:34	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 01:34	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 01:34	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 01:34	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 01:34	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 01:34	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 01:34	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 01:34	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 01:34	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 01:34	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 01:34	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 01:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 01:34	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 01:34	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 01:34	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 01:34	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 01:34	1

Client Sample ID: MSA-SW44B-081220

Lab Sample ID: 240-134931-26

Date Collected: 08/12/20 08:51
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 01:34	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 01:34	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 01:34	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 01:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 01:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 01:34	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 01:34	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 01:34	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 01:34	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 01:34	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 01:34	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 01:34	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 01:34	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 01:34*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 01:34*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*75 - 130*		*08/15/20 01:34*	*1*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*		*08/15/20 01:34*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/15/20 01:34*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/15/20 01:34*	*1*

Client Sample ID: MSA-SW44C-081220

Lab Sample ID: 240-134931-27

Date Collected: 08/12/20 08:54
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 01:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 01:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 01:57	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 01:57	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 01:57	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 01:57	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 01:57	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 01:57	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 01:57	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 01:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 01:57	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 01:57	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 01:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 01:57	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 01:57	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 01:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 01:57	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 01:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 01:57	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 01:57	1

Client Sample ID: MSA-SW44C-081220

Date Collected: 08/12/20 08:54
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-27

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 01:57	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 01:57	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 01:57	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 01:57	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 01:57	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 01:57	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 01:57	1
Acetone	**6.3**		5.0	5.4	ug/L			08/15/20 01:57	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 01:57	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 01:57	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 01:57	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 01:57	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 01:57	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 01:57	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 01:57	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 01:57	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 01:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 01:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 01:57	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 01:57	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 01:57	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 01:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 01:57	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 01:57	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 01:57	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 01:57	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 01:57	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 01:57	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 01:57	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 01:57	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 01:57	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 01:57	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 01:57	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 01:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 01:57	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 01:57	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 01:57	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 01:57	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 01:57	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 01:57	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 01:57	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 01:57	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 01:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 01:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 01:57	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 01:57	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 01:57	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 01:57	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 01:57	1

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Date Collected: 08/12/20 08:54 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 01:57	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 01:57	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 01:57	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 01:57*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 01:57*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/15/20 01:57*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/15/20 01:57*	*1*
Toluene-d8 (Surr)	*103*		*69 - 122*		*08/15/20 01:57*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/15/20 01:57*	*1*

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Date Collected: 08/12/20 08:58 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 02:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 02:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 02:19	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 02:19	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 02:19	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 02:19	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 02:19	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 02:19	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 02:19	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 02:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 02:19	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 02:19	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 02:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 02:19	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 02:19	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 02:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 02:19	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 02:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 02:19	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 02:19	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 02:19	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 02:19	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 02:19	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 02:19	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 02:19	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 02:19	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 02:19	1
Acetone	5.0	U	5.0	5.4	ug/L			08/15/20 02:19	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 02:19	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 02:19	1

Client Sample ID: MSA-SW44D-081220

Date Collected: 08/12/20 08:58
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-28

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 02:19	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 02:19	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 02:19	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 02:19	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 02:19	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 02:19	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 02:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 02:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 02:19	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 02:19	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 02:19	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 02:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 02:19	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 02:19	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 02:19	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 02:19	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 02:19	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 02:19	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 02:19	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 02:19	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 02:19	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 02:19	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 02:19	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 02:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 02:19	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 02:19	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 02:19	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 02:19	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 02:19	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 02:19	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 02:19	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 02:19	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 02:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 02:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 02:19	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 02:19	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 02:19	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 02:19	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 02:19	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 02:19	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 02:19	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 02:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 02:19*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 02:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/15/20 02:19*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/15/20 02:19*	*1*

Client Sample ID: MSA-SW44D-081220
Lab Sample ID: 240-134931-28

Date Collected: 08/12/20 08:58
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/15/20 02:19*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*08/15/20 02:19*	*1*

Client Sample ID: TB-081220
Lab Sample ID: 240-134931-29

Date Collected: 08/12/20 00:00
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 02:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/15/20 02:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/15/20 02:41	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/15/20 02:41	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/15/20 02:41	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/15/20 02:41	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/15/20 02:41	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/15/20 02:41	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/15/20 02:41	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/15/20 02:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/15/20 02:41	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 02:41	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/15/20 02:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/15/20 02:41	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/15/20 02:41	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/15/20 02:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/15/20 02:41	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/15/20 02:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/15/20 02:41	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/15/20 02:41	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/15/20 02:41	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/15/20 02:41	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/15/20 02:41	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/15/20 02:41	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/15/20 02:41	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/15/20 02:41	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/15/20 02:41	1
Acetone	5.0	U	5.0	5.4	ug/L			08/15/20 02:41	1
Benzene	1.0	U	1.0	0.38	ug/L			08/15/20 02:41	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/15/20 02:41	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/15/20 02:41	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/15/20 02:41	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/15/20 02:41	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/15/20 02:41	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/15/20 02:41	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/15/20 02:41	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/15/20 02:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/15/20 02:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/15/20 02:41	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/15/20 02:41	1

Client Sample ID: TB-081220

Lab Sample ID: 240-134931-29

Date Collected: 08/12/20 00:00
Date Received: 08/13/20 10:30

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/15/20 02:41	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/15/20 02:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/15/20 02:41	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/15/20 02:41	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/15/20 02:41	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/15/20 02:41	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/15/20 02:41	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/15/20 02:41	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/15/20 02:41	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/15/20 02:41	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/15/20 02:41	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/15/20 02:41	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/15/20 02:41	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/15/20 02:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/15/20 02:41	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/15/20 02:41	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/15/20 02:41	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/15/20 02:41	1
Styrene	1.0	U	1.0	0.40	ug/L			08/15/20 02:41	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/15/20 02:41	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/15/20 02:41	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/15/20 02:41	1
Toluene	1.0	U	1.0	0.35	ug/L			08/15/20 02:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/15/20 02:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/15/20 02:41	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/15/20 02:41	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/15/20 02:41	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/15/20 02:41	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/15/20 02:41	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/15/20 02:41	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/15/20 02:41	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/15/20 02:41	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/15/20 02:41*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/15/20 02:41*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/15/20 02:41*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/15/20 02:41*	*1*
Toluene-d8 (Surr)	*104*		*69 - 122*		*08/15/20 02:41*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/15/20 02:41*	*1*

Client Sample ID: MSA-SW46A-081220

Lab Sample ID: 240-134931-30

Date Collected: 08/12/20 10:02
Date Received: 08/13/20 10:30

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 03:06	1

Client Sample ID: MSA-SW46A-081220

Date Collected: 08/12/20 10:02
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-30

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 03:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 03:06	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 03:06	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 03:06	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 03:06	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 03:06	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 03:06	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 03:06	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 03:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 03:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 03:06	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 03:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 03:06	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 03:06	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 03:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 03:06	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 03:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 03:06	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 03:06	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 03:06	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 03:06	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 03:06	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 03:06	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 03:06	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 03:06	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 03:06	1
Acetone	**12**		5.0	5.4	ug/L			08/19/20 01:26	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 03:06	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 03:06	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 03:06	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 03:06	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 03:06	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 03:06	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 03:06	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 03:06	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 03:06	1
cis-1,2-Dichloroethene	**0.72**	**J**	1.0	0.38	ug/L			08/18/20 03:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 03:06	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 03:06	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 03:06	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 03:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 03:06	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 03:06	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 03:06	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 03:06	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 03:06	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 03:06	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 03:06	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 03:06	1

Client Sample ID: MSA-SW46A-081220

Lab Sample ID: 240-134931-30

Date Collected: 08/12/20 10:02
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 03:06	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 03:06	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 03:06	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 03:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 03:06	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 03:06	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 03:06	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 03:06	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 03:06	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 03:06	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 03:06	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 03:06	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 03:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 03:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 03:06	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 03:06	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 03:06	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 03:06	1
Vinyl chloride	**0.56**		0.50	0.50	ug/L			08/18/20 03:06	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 03:06	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 03:06	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 03:06	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 03:06*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 01:26*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 03:06*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 130*		*08/18/20 03:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/19/20 01:26*	*1*
4-Bromofluorobenzene (Surr)	*90*		*47 - 134*		*08/18/20 03:06*	*1*
4-Bromofluorobenzene (Surr)	*91*		*47 - 134*		*08/19/20 01:26*	*1*
Toluene-d8 (Surr)	*101*		*69 - 122*		*08/18/20 03:06*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/19/20 01:26*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 129*		*08/18/20 03:06*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/19/20 01:26*	*1*

Client Sample ID: MSA-SW47A-081220

Lab Sample ID: 240-134931-31

Date Collected: 08/12/20 09:46
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 03:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 03:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 03:28	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 03:28	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 03:28	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 03:28	1

Client Sample ID: MSA-SW47A-081220

Date Collected: 08/12/20 09:46
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-31

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 03:28	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 03:28	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 03:28	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 03:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 03:28	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 03:28	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 03:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 03:28	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 03:28	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 03:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 03:28	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 03:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 03:28	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 03:28	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 03:28	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 03:28	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 03:28	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 03:28	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 03:28	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 03:28	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 03:28	1
Acetone	**10**		5.0	5.4	ug/L			08/19/20 01:48	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 03:28	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 03:28	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 03:28	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 03:28	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 03:28	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 03:28	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 03:28	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 03:28	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 03:28	1
cis-1,2-Dichloroethene	**0.42**	**J**	1.0	0.38	ug/L			08/18/20 03:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 03:28	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 03:28	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 03:28	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 03:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 03:28	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 03:28	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 03:28	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 03:28	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 03:28	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 03:28	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 03:28	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 03:28	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 03:28	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 03:28	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 03:28	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 03:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 03:28	1

Client Sample ID: MSA-SW47A-081220

Date Collected: 08/12/20 09:46
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-31

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 03:28	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 03:28	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 03:28	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 03:28	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 03:28	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 03:28	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 03:28	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 03:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 03:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 03:28	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 03:28	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 03:28	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 03:28	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 03:28	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 03:28	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 03:28	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 03:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 03:28*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 01:48*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 03:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 130*		*08/18/20 03:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/19/20 01:48*	*1*
4-Bromofluorobenzene (Surr)	*88*		*47 - 134*		*08/18/20 03:28*	*1*
4-Bromofluorobenzene (Surr)	*92*		*47 - 134*		*08/19/20 01:48*	*1*
Toluene-d8 (Surr)	*100*		*69 - 122*		*08/18/20 03:28*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/19/20 01:48*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 129*		*08/18/20 03:28*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/19/20 01:48*	*1*

Client Sample ID: MSA-SW48A-081220

Date Collected: 08/12/20 09:29
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-32

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 03:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 03:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 03:51	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 03:51	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 03:51	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 03:51	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 03:51	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 03:51	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 03:51	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 03:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 03:51	1

Client Sample ID: MSA-SW48A-081220

Date Collected: 08/12/20 09:29
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-32

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 03:51	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 03:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 03:51	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 03:51	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 03:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 03:51	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 03:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 03:51	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 03:51	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 03:51	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 03:51	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 03:51	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 03:51	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 03:51	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 03:51	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 03:51	1
Acetone	**11**		5.0	5.4	ug/L			08/19/20 02:10	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 03:51	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 03:51	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 03:51	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 03:51	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 03:51	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 03:51	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 03:51	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 03:51	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 03:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 03:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 03:51	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 03:51	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 03:51	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 03:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 03:51	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 03:51	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 03:51	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 03:51	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 03:51	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 03:51	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 03:51	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 03:51	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 03:51	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 03:51	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 03:51	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 03:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 03:51	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 03:51	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 03:51	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 03:51	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 03:51	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 03:51	1

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Date Collected: 08/12/20 09:29 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 03:51	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 03:51	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 03:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 03:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 03:51	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 03:51	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 03:51	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 03:51	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 03:51	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 03:51	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 03:51	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 03:51	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 03:51*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 02:10*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 03:51*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*75 - 130*		*08/18/20 03:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/19/20 02:10*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/18/20 03:51*	*1*
4-Bromofluorobenzene (Surr)	*89*		*47 - 134*		*08/19/20 02:10*	*1*
Toluene-d8 (Surr)	*105*		*69 - 122*		*08/18/20 03:51*	*1*
Toluene-d8 (Surr)	*102*		*69 - 122*		*08/19/20 02:10*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/18/20 03:51*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 129*		*08/19/20 02:10*	*1*

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Date Collected: 08/12/20 09:14 **Matrix: Water**
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 04:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 04:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 04:13	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 04:13	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 04:13	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 04:13	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 04:13	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 04:13	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 04:13	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 04:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 04:13	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 04:13	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 04:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 04:13	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 04:13	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 04:13	1

Client Sample ID: MSA-SW49A-081220

Date Collected: 08/12/20 09:14
Date Received: 08/13/20 10:30

Lab Sample ID: 240-134931-33

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 04:13	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 04:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 04:13	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 04:13	1
2-Chloroethyl vinyl ether	10	U *	10	1.1	ug/L			08/18/20 04:13	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 04:13	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 04:13	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 04:13	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 04:13	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 04:13	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 04:13	1
Acetone	**12**		5.0	5.4	ug/L			08/19/20 02:32	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 04:13	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 04:13	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 04:13	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 04:13	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 04:13	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 04:13	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 04:13	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 04:13	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 04:13	1
cis-1,2-Dichloroethene	**0.50**	**J**	1.0	0.38	ug/L			08/18/20 04:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 04:13	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 04:13	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 04:13	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 04:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 04:13	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 04:13	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 04:13	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 04:13	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 04:13	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 04:13	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 04:13	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 04:13	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 04:13	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 04:13	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 04:13	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 04:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 04:13	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 04:13	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 04:13	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 04:13	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 04:13	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 04:13	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 04:13	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 04:13	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 04:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 04:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 04:13	1

Client Sample ID: MSA-SW49A-081220
Lab Sample ID: 240-134931-33

Date Collected: 08/12/20 09:14
Matrix: Water
Date Received: 08/13/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 04:13	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 04:13	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 04:13	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 04:13	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 04:13	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 04:13	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 04:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 04:13*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/19/20 02:32*	*1*
Chlorodifluoromethane TIC	*1.0*	*U*	*ug/L*			*75-45-6*		*08/18/20 04:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/18/20 04:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*75 - 130*		*08/19/20 02:32*	*1*
4-Bromofluorobenzene (Surr)	*93*		*47 - 134*		*08/18/20 04:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*47 - 134*		*08/19/20 02:32*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/18/20 04:13*	*1*
Toluene-d8 (Surr)	*108*		*69 - 122*		*08/19/20 02:32*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/18/20 04:13*	*1*
Dibromofluoromethane (Surr)	*107*		*78 - 129*		*08/19/20 02:32*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	1.0	0.41	ug/L
1,1,1-Trichloroethane	1.0	0.24	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.56	ug/L
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	0.41	ug/L
1,1-Dichloroethane	1.0	0.41	ug/L
1,1-Dichloroethene	1.0	0.46	ug/L
1,1-Dichloropropene	1.0	0.37	ug/L
1,2,3-Trichlorobenzene	1.0	0.54	ug/L
1,2,3-Trichloropropane	1.0	0.51	ug/L
1,2,3-Trimethylbenzene	5.0	0.36	ug/L
1,2,4-Trichlorobenzene	1.0	0.81	ug/L
1,2,4-Trimethylbenzene	1.0	0.45	ug/L
1,2-Dibromo-3-Chloropropane	5.0	0.91	ug/L
1,2-Dibromoethane	1.0	0.37	ug/L
1,2-Dichlorobenzene	1.0	0.43	ug/L
1,2-Dichloroethane	1.0	0.43	ug/L
1,2-Dichloropropane	1.0	0.37	ug/L
1,3-Dichlorobenzene	1.0	0.40	ug/L
1,3-Dichloropropane	1.0	0.21	ug/L
1,4-Dichlorobenzene	1.0	0.37	ug/L
2,2-Dichloropropane	1.0	0.95	ug/L
2-Butanone	5.0	2.4	ug/L
2-Chloroethyl vinyl ether	10	1.1	ug/L
2-Chlorotoluene	1.0	0.42	ug/L
2-Hexanone	5.0	2.1	ug/L
4-Chlorotoluene	1.0	0.44	ug/L
4-Methyl-2-pentanone	5.0	2.1	ug/L
Acetone	5.0	5.4	ug/L
Benzene	1.0	0.38	ug/L
Bromobenzene	1.0	0.38	ug/L
Bromochloromethane	1.0	0.52	ug/L
Bromodichloromethane	1.0	0.35	ug/L
Bromoform	1.0	0.76	ug/L
Bromomethane	1.0	0.42	ug/L
Carbon disulfide	1.0	0.28	ug/L
Carbon tetrachloride	1.0	0.26	ug/L
Chlorobenzene	1.0	0.32	ug/L
Chloroethane	1.0	0.83	ug/L
Chloroform	1.0	0.40	ug/L
Chloromethane	1.0	0.64	ug/L
cis-1,2-Dichloroethene	1.0	0.38	ug/L
cis-1,3-Dichloropropene	1.0	0.61	ug/L
Dibromochloromethane	1.0	0.39	ug/L
Dibromomethane	1.0	0.33	ug/L
Dichlorodifluoromethane	1.0	0.35	ug/L
Diisopropyl ether	5.0	0.36	ug/L
Ethylbenzene	1.0	0.39	ug/L
Ethyl-t-butyl ether (ETBE)	5.0	0.43	ug/L
Hexachlorobutadiene	1.0	0.83	ug/L
Isopropylbenzene	1.0	0.45	ug/L
Methyl tert-butyl ether	1.0	0.44	ug/L
Methylene Chloride	5.0	1.3	ug/L
m-Xylene & p-Xylene	2.0	0.40	ug/L

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	RL	MDL	Units
Naphthalene	1.0	0.82	ug/L
n-Butylbenzene	1.0	0.59	ug/L
n-Propylbenzene	1.0	0.46	ug/L
o-Xylene	1.0	0.43	ug/L
p-Isopropyltoluene	1.0	0.49	ug/L
sec-Butylbenzene	1.0	0.63	ug/L
Styrene	1.0	0.40	ug/L
Tert-amyl-methyl ether (TAME)	5.0	0.39	ug/L
tert-Butyl alcohol	20	1.7	ug/L
tert-Butylbenzene	1.0	0.51	ug/L
Tetrachloroethene	1.0	0.33	ug/L
Toluene	1.0	0.35	ug/L
trans-1,2-Dichloroethene	1.0	0.43	ug/L
trans-1,3-Dichloropropene	1.0	0.67	ug/L
Trichloroethene	1.0	0.36	ug/L
Trichlorofluoromethane	1.0	0.45	ug/L
Vinyl acetate	2.0	0.78	ug/L
Vinyl chloride	0.50	0.50	ug/L
Xylenes, Total	2.0	0.42	ug/L

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
200-54623-C-4 MS	Matrix Spike	93	102	107	96
200-54623-C-4 MSD	Matrix Spike Duplicate	94	102	107	96
240-134931-1	MSA-SW37A-081220	99	92	103	102
240-134931-1	MSA-SW37A-081220	104	93	105	106
240-134931-2	MSA-SW37B-081220	104	94	107	106
240-134931-2	MSA-SW37B-081220	104	95	108	107
240-134931-3	MSA-SW37C-081220	106	97	106	107
240-134931-3	MSA-SW37C-081220	103	93	104	105
240-134931-4	MSA-SW37D-081220	101	91	103	102
240-134931-4	MSA-SW37D-081220	100	88	101	103
240-134931-5	MSA-SW38A-081220	102	93	105	105
240-134931-5	MSA-SW38A-081220	105	95	105	106
240-134931-6	MSA-SW38B-081220	104	93	103	104
240-134931-6	MSA-SW38B-081220	106	93	107	108
240-134931-7	MSA-SW38C-081220	104	95	105	105
240-134931-8	MSA-SW38D-081220	103	95	105	106
240-134931-8	MSA-SW38D-081220	106	90	106	106
240-134931-9	MSA-SW40A-081220	103	94	104	103
240-134931-9	MSA-SW40A-081220	102	90	102	103
240-134931-10	MSA-SW40B-081220	104	94	106	107
240-134931-10	MSA-SW40B-081220	102	89	103	105
240-134931-11	MSA-SW40C-081220	105	94	105	105
240-134931-12	MSA-SW40D-081220	104	92	101	104
240-134931-13	MSA-SW41A-081220	103	89	103	104
240-134931-14	MSA-SW41B-081220	105	93	107	106
240-134931-15	MSA-SW41C-081220	106	92	103	107
240-134931-16	MSA-SW41D-081220	94	110	102	89
240-134931-17	MSA-SW42A-081220	93	106	101	89
240-134931-18	MSA-SW42B-081220	106	95	105	107
240-134931-18	MSA-SW42B-081220	104	93	105	105
240-134931-19	MSA-SW42C-081220	102	93	103	104
240-134931-19	MSA-SW42C-081220	104	94	106	105
240-134931-20	MSA-SW42D-081220	105	94	105	106
240-134931-21	MSA-SW43A-081220	103	94	104	105
240-134931-22	MSA-SW43B-081220	104	94	105	106
240-134931-23	MSA-SW43C-081220	104	92	105	105
240-134931-24	MSA-SW43D-081220	103	93	103	103
240-134931-25	MSA-SW44A-081220	101	92	102	101
240-134931-26	MSA-SW44B-081220	107	95	106	106
240-134931-27	MSA-SW44C-081220	105	93	103	105
240-134931-28	MSA-SW44D-081220	104	93	105	104
240-134931-29	TB-081220	105	92	104	105
240-134931-30	MSA-SW46A-081220	102	90	101	104
240-134931-30	MSA-SW46A-081220	105	91	106	105
240-134931-31	MSA-SW47A-081220	101	88	100	103
240-134931-31	MSA-SW47A-081220	106	92	105	107
240-134931-32	MSA-SW48A-081220	105	93	105	106
240-134931-32	MSA-SW48A-081220	104	89	102	106
240-134931-33	MSA-SW49A-081220	106	93	106	107

Surrogate Summary

Client: Tetra Tech, Inc. Job ID: 240-134931-1
Project/Site: MSA Surface Water SDG: MSA Frog Mortar Creek

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(75-130)	(47-134)	(69-122)	(78-129)
240-134931-33	MSA-SW49A-081220	106	94	108	107
240-135021-B-1 MS	Matrix Spike	92	109	103	92
240-135021-B-1 MSD	Matrix Spike Duplicate	94	110	105	93
LCS 240-447281/5	Lab Control Sample	93	102	108	96
LCS 240-447506/5	Lab Control Sample	96	106	109	97
LCS 240-447698/5	Lab Control Sample	97	105	110	99
LCS 240-447867/5	Lab Control Sample	90	107	100	89
MB 240-447281/8	Method Blank	103	96	106	105
MB 240-447506/8	Method Blank	104	96	108	104
MB 240-447698/8	Method Blank	104	97	107	105
MB 240-447867/8	Method Blank	87	101	96	83

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-447281/8
Matrix: Water
Analysis Batch: 447281

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/14/20 19:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/14/20 19:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/14/20 19:36	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/14/20 19:36	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/14/20 19:36	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/14/20 19:36	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/14/20 19:36	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/14/20 19:36	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/14/20 19:36	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/14/20 19:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/14/20 19:36	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/14/20 19:36	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/14/20 19:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/14/20 19:36	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/14/20 19:36	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/14/20 19:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/14/20 19:36	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/14/20 19:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/14/20 19:36	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/14/20 19:36	1
2-Chloroethyl vinyl ether	10	U	10	1.1	ug/L			08/14/20 19:36	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/14/20 19:36	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/14/20 19:36	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/14/20 19:36	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/14/20 19:36	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/14/20 19:36	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/14/20 19:36	1
Acetone	5.0	U	5.0	5.4	ug/L			08/14/20 19:36	1
Benzene	1.0	U	1.0	0.38	ug/L			08/14/20 19:36	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/14/20 19:36	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/14/20 19:36	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/14/20 19:36	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/14/20 19:36	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/14/20 19:36	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/14/20 19:36	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/14/20 19:36	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/14/20 19:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/14/20 19:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/14/20 19:36	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/14/20 19:36	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/14/20 19:36	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/14/20 19:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/14/20 19:36	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/14/20 19:36	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/14/20 19:36	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/14/20 19:36	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/14/20 19:36	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/14/20 19:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447281/8
Matrix: Water
Analysis Batch: 447281

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/14/20 19:36	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/14/20 19:36	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/14/20 19:36	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/14/20 19:36	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/14/20 19:36	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/14/20 19:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/14/20 19:36	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/14/20 19:36	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/14/20 19:36	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/14/20 19:36	1
Styrene	1.0	U	1.0	0.40	ug/L			08/14/20 19:36	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/14/20 19:36	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/14/20 19:36	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/14/20 19:36	1
Toluene	1.0	U	1.0	0.35	ug/L			08/14/20 19:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/14/20 19:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/14/20 19:36	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/14/20 19:36	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/14/20 19:36	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/14/20 19:36	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/14/20 19:36	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/14/20 19:36	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/14/20 19:36	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/14/20 19:36	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/14/20 19:36*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 130*		*08/14/20 19:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*47 - 134*		*08/14/20 19:36*	*1*
Toluene-d8 (Surr)	*106*		*69 - 122*		*08/14/20 19:36*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/14/20 19:36*	*1*

Lab Sample ID: LCS 240-447281/5
Matrix: Water
Analysis Batch: 447281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	20.0		ug/L		100	77 - 120
1,1,1-Trichloroethane	20.0	18.5		ug/L		93	65 - 141
1,1,2,2-Tetrachloroethane	20.0	23.6		ug/L		118	45 - 151
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	20.4		ug/L		102	54 - 148
1,1-Dichloroethane	20.0	21.1		ug/L		105	74 - 126
1,1-Dichloroethene	20.0	19.4		ug/L		97	73 - 129
1,1-Dichloropropene	20.0	20.4		ug/L		102	78 - 120
1,2,3-Trichlorobenzene	20.0	18.5		ug/L		93	42 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-447281/5
Matrix: Water
Analysis Batch: 447281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	20.0	21.3		ug/L		107	57 - 137
1,2,4-Trichlorobenzene	20.0	16.7		ug/L		83	47 - 120
1,2,4-Trimethylbenzene	20.0	21.2		ug/L		106	66 - 129
1,2-Dibromo-3-Chloropropane	20.0	19.8		ug/L		99	34 - 136
1,2-Dichlorobenzene	20.0	20.9		ug/L		104	74 - 120
1,2-Dichloroethane	20.0	18.0		ug/L		90	66 - 129
1,2-Dichloropropane	20.0	21.6		ug/L		108	79 - 127
1,3-Dichlorobenzene	20.0	19.3		ug/L		96	74 - 120
1,3-Dichloropropane	20.0	21.8		ug/L		109	74 - 122
1,4-Dichlorobenzene	20.0	19.1		ug/L		95	75 - 120
2,2-Dichloropropane	20.0	22.4		ug/L		112	67 - 137
2-Chloroethyl vinyl ether	20.0	39.3	*	ug/L		196	29 - 146
2-Chlorotoluene	20.0	21.3		ug/L		106	73 - 126
2-Hexanone	40.0	42.9		ug/L		107	43 - 142
Bromobenzene	20.0	19.3		ug/L		96	77 - 120
Bromochloromethane	20.0	19.8		ug/L		99	70 - 128
4-Chlorotoluene	20.0	20.5		ug/L		102	73 - 126
p-Isopropyltoluene	20.0	20.2		ug/L		101	66 - 127
Acetone	40.0	48.4		ug/L		121	33 - 155
Benzene	20.0	21.4		ug/L		107	77 - 123
Bromoform	20.0	17.3		ug/L		86	47 - 133
Bromomethane	20.0	18.5		ug/L		92	48 - 144
Carbon disulfide	20.0	19.5		ug/L		98	67 - 127
Carbon tetrachloride	20.0	17.7		ug/L		88	61 - 142
Chlorobenzene	20.0	20.3		ug/L		102	80 - 120
Chloroethane	20.0	21.7		ug/L		108	41 - 147
Chloroform	20.0	19.8		ug/L		99	74 - 127
Chloromethane	20.0	20.8		ug/L		104	46 - 148
cis-1,2-Dichloroethene	20.0	19.2		ug/L		96	75 - 124
cis-1,3-Dichloropropene	20.0	19.3		ug/L		97	68 - 128
Hexachlorobutadiene	20.0	14.1		ug/L		71	40 - 120
Dibromomethane	20.0	16.2		ug/L		81	67 - 121
Bromodichloromethane	20.0	18.6		ug/L		93	73 - 122
Dichlorodifluoromethane	20.0	17.2		ug/L		86	35 - 137
Ethylbenzene	20.0	20.5		ug/L		102	80 - 120
1,2-Dibromoethane	20.0	19.6		ug/L		98	73 - 120
Naphthalene	20.0	20.8		ug/L		104	28 - 130
m-Xylene & p-Xylene	20.0	20.8		ug/L		104	79 - 121
n-Butylbenzene	20.0	20.1		ug/L		100	54 - 129
Isopropylbenzene	20.0	20.7		ug/L		103	73 - 123
n-Propylbenzene	20.0	21.0		ug/L		105	67 - 130
2-Butanone	40.0	40.1		ug/L		100	41 - 151
4-Methyl-2-pentanone	40.0	41.4		ug/L		103	43 - 145
sec-Butylbenzene	20.0	20.6		ug/L		103	60 - 131
Methyl tert-butyl ether	20.0	19.4		ug/L		97	57 - 127
Methylene Chloride	20.0	20.6		ug/L		103	63 - 134
o-Xylene	20.0	21.1		ug/L		105	75 - 123
Styrene	20.0	20.7		ug/L		103	75 - 121
tert-Butylbenzene	20.0	19.6		ug/L		98	63 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-447281/5
Matrix: Water
Analysis Batch: 447281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	18.1		ug/L		91	70 - 125
Toluene	20.0	21.5		ug/L		108	79 - 122
trans-1,2-Dichloroethene	20.0	20.4		ug/L		102	74 - 130
trans-1,3-Dichloropropene	20.0	19.6		ug/L		98	64 - 120
Trichloroethene	20.0	18.2		ug/L		91	71 - 121
Trichlorofluoromethane	20.0	16.9		ug/L		84	52 - 148
Vinyl acetate	20.0	21.5		ug/L		107	44 - 160
Vinyl chloride	20.0	21.4		ug/L		107	61 - 134
tert-Butyl alcohol	200	225		ug/L		112	15 - 169
Xylenes, Total	40.0	41.9		ug/L		105	78 - 122
Dibromochloromethane	20.0	19.3		ug/L		97	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 130*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*
Toluene-d8 (Surr)	*108*		*69 - 122*
Dibromofluoromethane (Surr)	*96*		*78 - 129*

Lab Sample ID: MB 240-447506/8
Matrix: Water
Analysis Batch: 447506

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 19:16	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/17/20 19:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/17/20 19:16	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/17/20 19:16	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/17/20 19:16	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/17/20 19:16	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/17/20 19:16	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/17/20 19:16	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/17/20 19:16	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/17/20 19:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/17/20 19:16	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 19:16	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/17/20 19:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/17/20 19:16	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/17/20 19:16	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/17/20 19:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/17/20 19:16	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/17/20 19:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/17/20 19:16	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/17/20 19:16	1
2-Chloroethyl vinyl ether	10	U	10	1.1	ug/L			08/17/20 19:16	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/17/20 19:16	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/17/20 19:16	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/17/20 19:16	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/17/20 19:16	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447506/8
Matrix: Water
Analysis Batch: 447506

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/17/20 19:16	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/17/20 19:16	1
Acetone	5.0	U	5.0	5.4	ug/L			08/17/20 19:16	1
Benzene	1.0	U	1.0	0.38	ug/L			08/17/20 19:16	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/17/20 19:16	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/17/20 19:16	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/17/20 19:16	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/17/20 19:16	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/17/20 19:16	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/17/20 19:16	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/17/20 19:16	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/17/20 19:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/17/20 19:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/17/20 19:16	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/17/20 19:16	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/17/20 19:16	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/17/20 19:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/17/20 19:16	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/17/20 19:16	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/17/20 19:16	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/17/20 19:16	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/17/20 19:16	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/17/20 19:16	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/17/20 19:16	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/17/20 19:16	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/17/20 19:16	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/17/20 19:16	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/17/20 19:16	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/17/20 19:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/17/20 19:16	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/17/20 19:16	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/17/20 19:16	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/17/20 19:16	1
Styrene	1.0	U	1.0	0.40	ug/L			08/17/20 19:16	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/17/20 19:16	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/17/20 19:16	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/17/20 19:16	1
Toluene	1.0	U	1.0	0.35	ug/L			08/17/20 19:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/17/20 19:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/17/20 19:16	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/17/20 19:16	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/17/20 19:16	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/17/20 19:16	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/17/20 19:16	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/17/20 19:16	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/17/20 19:16	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/17/20 19:16	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447506/8
Matrix: Water
Analysis Batch: 447506

Client Sample ID: Method Blank
Prep Type: Total/NA

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/17/20 19:16	1
Tetrahydrofuran	6.22		ug/L		4.90	109-99-9		08/17/20 19:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 130		08/17/20 19:16	1
4-Bromofluorobenzene (Surr)	96		47 - 134		08/17/20 19:16	1
Toluene-d8 (Surr)	108		69 - 122		08/17/20 19:16	1
Dibromofluoromethane (Surr)	104		78 - 129		08/17/20 19:16	1

Lab Sample ID: LCS 240-447506/5
Matrix: Water
Analysis Batch: 447506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	20.2		ug/L		101	77 - 120
1,1,1-Trichloroethane	20.0	18.4		ug/L		92	65 - 141
1,1,2,2-Tetrachloroethane	20.0	24.2		ug/L		121	45 - 151
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.9		ug/L		100	54 - 148
1,1-Dichloroethane	20.0	21.1		ug/L		106	74 - 126
1,1-Dichloroethene	20.0	19.4		ug/L		97	73 - 129
1,1-Dichloropropene	20.0	20.6		ug/L		103	78 - 120
1,2,3-Trichlorobenzene	20.0	18.8		ug/L		94	42 - 126
1,2,3-Trichloropropane	20.0	21.0		ug/L		105	57 - 137
1,2,4-Trichlorobenzene	20.0	17.3		ug/L		86	47 - 120
1,2,4-Trimethylbenzene	20.0	20.8		ug/L		104	66 - 129
1,2-Dibromo-3-Chloropropane	20.0	20.9		ug/L		105	34 - 136
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	74 - 120
1,2-Dichloroethane	20.0	18.4		ug/L		92	66 - 129
1,2-Dichloropropane	20.0	21.6		ug/L		108	79 - 127
1,3-Dichlorobenzene	20.0	19.4		ug/L		97	74 - 120
1,3-Dichloropropane	20.0	21.8		ug/L		109	74 - 122
1,4-Dichlorobenzene	20.0	18.8		ug/L		94	75 - 120
2,2-Dichloropropane	20.0	23.5		ug/L		117	67 - 137
2-Chloroethyl vinyl ether	20.0	39.4	*	ug/L		197	29 - 146
2-Chlorotoluene	20.0	21.0		ug/L		105	73 - 126
2-Hexanone	40.0	44.7		ug/L		112	43 - 142
Bromobenzene	20.0	18.6		ug/L		93	77 - 120
Bromochloromethane	20.0	21.0		ug/L		105	70 - 128
4-Chlorotoluene	20.0	20.1		ug/L		100	73 - 126
p-Isopropyltoluene	20.0	19.8		ug/L		99	66 - 127
Acetone	40.0	57.4		ug/L		143	33 - 155
Benzene	20.0	21.5		ug/L		108	77 - 123
Bromoform	20.0	18.0		ug/L		90	47 - 133
Bromomethane	20.0	18.5		ug/L		93	48 - 144
Carbon disulfide	20.0	19.7		ug/L		99	67 - 127
Carbon tetrachloride	20.0	17.8		ug/L		89	61 - 142
Chlorobenzene	20.0	20.3		ug/L		102	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-447506/5
Matrix: Water
Analysis Batch: 447506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	20.0	21.4		ug/L		107	41 - 147
Chloroform	20.0	20.0		ug/L		100	74 - 127
Chloromethane	20.0	20.4		ug/L		102	46 - 148
cis-1,2-Dichloroethene	20.0	19.7		ug/L		99	75 - 124
cis-1,3-Dichloropropene	20.0	19.7		ug/L		98	68 - 128
Hexachlorobutadiene	20.0	14.3		ug/L		72	40 - 120
Dibromomethane	20.0	16.3		ug/L		82	67 - 121
Bromodichloromethane	20.0	18.5		ug/L		93	73 - 122
Dichlorodifluoromethane	20.0	17.5		ug/L		88	35 - 137
Ethylbenzene	20.0	20.6		ug/L		103	80 - 120
1,2-Dibromoethane	20.0	20.0		ug/L		100	73 - 120
Naphthalene	20.0	21.6		ug/L		108	28 - 130
m-Xylene & p-Xylene	20.0	21.1		ug/L		106	79 - 121
n-Butylbenzene	20.0	20.1		ug/L		100	54 - 129
Isopropylbenzene	20.0	20.9		ug/L		104	73 - 123
n-Propylbenzene	20.0	21.0		ug/L		105	67 - 130
2-Butanone	40.0	45.4		ug/L		113	41 - 151
4-Methyl-2-pentanone	40.0	43.7		ug/L		109	43 - 145
sec-Butylbenzene	20.0	20.0		ug/L		100	60 - 131
Methyl tert-butyl ether	20.0	20.0		ug/L		100	57 - 127
Methylene Chloride	20.0	20.8		ug/L		104	63 - 134
o-Xylene	20.0	21.3		ug/L		107	75 - 123
Styrene	20.0	21.0		ug/L		105	75 - 121
tert-Butylbenzene	20.0	18.9		ug/L		94	63 - 126
Tetrachloroethene	20.0	18.4		ug/L		92	70 - 125
Toluene	20.0	21.9		ug/L		110	79 - 122
trans-1,2-Dichloroethene	20.0	20.3		ug/L		101	74 - 130
trans-1,3-Dichloropropene	20.0	19.9		ug/L		99	64 - 120
Trichloroethene	20.0	18.3		ug/L		91	71 - 121
Trichlorofluoromethane	20.0	17.0		ug/L		85	52 - 148
Vinyl acetate	20.0	21.7		ug/L		109	44 - 160
Vinyl chloride	20.0	21.4		ug/L		107	61 - 134
tert-Butyl alcohol	200	338		ug/L		169	15 - 169
Xylenes, Total	40.0	42.4		ug/L		106	78 - 122
Dibromochloromethane	20.0	19.4		ug/L		97	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 130*
4-Bromofluorobenzene (Surr)	*106*		*47 - 134*
Toluene-d8 (Surr)	*109*		*69 - 122*
Dibromofluoromethane (Surr)	*97*		*78 - 129*

Lab Sample ID: MB 240-447698/8
Matrix: Water
Analysis Batch: 447698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 20:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447698/8
Matrix: Water
Analysis Batch: 447698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/18/20 20:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/18/20 20:57	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/18/20 20:57	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/18/20 20:57	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/18/20 20:57	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/18/20 20:57	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/18/20 20:57	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/18/20 20:57	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/18/20 20:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/18/20 20:57	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 20:57	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/18/20 20:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/18/20 20:57	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/18/20 20:57	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/18/20 20:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/18/20 20:57	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/18/20 20:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/18/20 20:57	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/18/20 20:57	1
2-Chloroethyl vinyl ether	10	U	10	1.1	ug/L			08/18/20 20:57	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/18/20 20:57	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/18/20 20:57	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/18/20 20:57	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/18/20 20:57	1
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/18/20 20:57	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/18/20 20:57	1
Acetone	5.0	U	5.0	5.4	ug/L			08/18/20 20:57	1
Benzene	1.0	U	1.0	0.38	ug/L			08/18/20 20:57	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/18/20 20:57	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/18/20 20:57	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/18/20 20:57	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/18/20 20:57	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/18/20 20:57	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/18/20 20:57	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/18/20 20:57	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/18/20 20:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/18/20 20:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/18/20 20:57	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/18/20 20:57	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/18/20 20:57	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/18/20 20:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/18/20 20:57	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/18/20 20:57	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/18/20 20:57	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/18/20 20:57	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/18/20 20:57	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/18/20 20:57	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/18/20 20:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447698/8
Matrix: Water
Analysis Batch: 447698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/18/20 20:57	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/18/20 20:57	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/18/20 20:57	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/18/20 20:57	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/18/20 20:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/18/20 20:57	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/18/20 20:57	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/18/20 20:57	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/18/20 20:57	1
Styrene	1.0	U	1.0	0.40	ug/L			08/18/20 20:57	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/18/20 20:57	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/18/20 20:57	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/18/20 20:57	1
Toluene	1.0	U	1.0	0.35	ug/L			08/18/20 20:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/18/20 20:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/18/20 20:57	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/18/20 20:57	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/18/20 20:57	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/18/20 20:57	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/18/20 20:57	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/18/20 20:57	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/18/20 20:57	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/18/20 20:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/18/20 20:57*	*1*
Tetrahydrofuran	*11.9*		*ug/L*		*4.90*	*109-99-9*		*08/18/20 20:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*75 - 130*		*08/18/20 20:57*	*1*
4-Bromofluorobenzene (Surr)	*97*		*47 - 134*		*08/18/20 20:57*	*1*
Toluene-d8 (Surr)	*107*		*69 - 122*		*08/18/20 20:57*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 129*		*08/18/20 20:57*	*1*

Lab Sample ID: LCS 240-447698/5
Matrix: Water
Analysis Batch: 447698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	19.3		ug/L		96	77 - 120
1,1,1-Trichloroethane	20.0	15.8		ug/L		79	65 - 141
1,1,2,2-Tetrachloroethane	20.0	23.3		ug/L		116	45 - 151
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	17.1		ug/L		86	54 - 148
1,1-Dichloroethane	20.0	19.9		ug/L		99	74 - 126
1,1-Dichloroethene	20.0	16.9		ug/L		85	73 - 129
1,1-Dichloropropene	20.0	17.8		ug/L		89	78 - 120
1,2,3-Trichlorobenzene	20.0	18.1		ug/L		91	42 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-447698/5
Matrix: Water
Analysis Batch: 447698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	20.0	20.9		ug/L		105	57 - 137
1,2,4-Trichlorobenzene	20.0	16.1		ug/L		81	47 - 120
1,2,4-Trimethylbenzene	20.0	19.5		ug/L		98	66 - 129
1,2-Dibromo-3-Chloropropane	20.0	19.9		ug/L		100	34 - 136
1,2-Dichlorobenzene	20.0	20.1		ug/L		100	74 - 120
1,2-Dichloroethane	20.0	18.1		ug/L		91	66 - 129
1,2-Dichloropropane	20.0	20.7		ug/L		103	79 - 127
1,3-Dichlorobenzene	20.0	18.4		ug/L		92	74 - 120
1,3-Dichloropropane	20.0	21.5		ug/L		107	74 - 122
1,4-Dichlorobenzene	20.0	18.2		ug/L		91	75 - 120
2,2-Dichloropropane	20.0	18.3		ug/L		92	67 - 137
2-Chloroethyl vinyl ether	20.0	39.8	*	ug/L		199	29 - 146
2-Chlorotoluene	20.0	19.5		ug/L		98	73 - 126
2-Hexanone	40.0	43.7		ug/L		109	43 - 142
Bromobenzene	20.0	18.1		ug/L		91	77 - 120
Bromochloromethane	20.0	20.1		ug/L		101	70 - 128
4-Chlorotoluene	20.0	19.0		ug/L		95	73 - 126
p-Isopropyltoluene	20.0	17.5		ug/L		87	66 - 127
Acetone	40.0	52.6		ug/L		131	33 - 155
Benzene	20.0	20.1		ug/L		100	77 - 123
Bromoform	20.0	17.1		ug/L		86	47 - 133
Bromomethane	20.0	19.1		ug/L		96	48 - 144
Carbon disulfide	20.0	17.0		ug/L		85	67 - 127
Carbon tetrachloride	20.0	14.9		ug/L		74	61 - 142
Chlorobenzene	20.0	19.2		ug/L		96	80 - 120
Chloroethane	20.0	22.1		ug/L		111	41 - 147
Chloroform	20.0	19.4		ug/L		97	74 - 127
Chloromethane	20.0	22.2		ug/L		111	46 - 148
cis-1,2-Dichloroethene	20.0	18.7		ug/L		93	75 - 124
cis-1,3-Dichloropropene	20.0	19.3		ug/L		96	68 - 128
Hexachlorobutadiene	20.0	13.0		ug/L		65	40 - 120
Dibromomethane	20.0	15.7		ug/L		79	67 - 121
Bromodichloromethane	20.0	17.9		ug/L		89	73 - 122
Dichlorodifluoromethane	20.0	19.9		ug/L		99	35 - 137
Ethylbenzene	20.0	18.5		ug/L		93	80 - 120
1,2-Dibromoethane	20.0	19.3		ug/L		96	73 - 120
Naphthalene	20.0	20.8		ug/L		104	28 - 130
m-Xylene & p-Xylene	20.0	19.3		ug/L		96	79 - 121
n-Butylbenzene	20.0	17.5		ug/L		88	54 - 129
Isopropylbenzene	20.0	18.2		ug/L		91	73 - 123
n-Propylbenzene	20.0	18.5		ug/L		93	67 - 130
2-Butanone	40.0	43.3		ug/L		108	41 - 151
4-Methyl-2-pentanone	40.0	42.5		ug/L		106	43 - 145
sec-Butylbenzene	20.0	17.4		ug/L		87	60 - 131
Methyl tert-butyl ether	20.0	18.5		ug/L		92	57 - 127
Methylene Chloride	20.0	20.1		ug/L		101	63 - 134
o-Xylene	20.0	19.7		ug/L		99	75 - 123
Styrene	20.0	20.2		ug/L		101	75 - 121
tert-Butylbenzene	20.0	16.6		ug/L		83	63 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-447698/5
Matrix: Water
Analysis Batch: 447698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	16.0		ug/L		80	70 - 125
Toluene	20.0	20.1		ug/L		101	79 - 122
trans-1,2-Dichloroethene	20.0	18.7		ug/L		94	74 - 130
trans-1,3-Dichloropropene	20.0	19.4		ug/L		97	64 - 120
Trichloroethene	20.0	16.4		ug/L		82	71 - 121
Trichlorofluoromethane	20.0	17.5		ug/L		87	52 - 148
Vinyl acetate	20.0	20.8		ug/L		104	44 - 160
Vinyl chloride	20.0	22.2		ug/L		111	61 - 134
tert-Butyl alcohol	200	265		ug/L		133	15 - 169
Xylenes, Total	40.0	39.0		ug/L		98	78 - 122
Dibromochloromethane	20.0	18.9		ug/L		95	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 130*
4-Bromofluorobenzene (Surr)	*105*		*47 - 134*
Toluene-d8 (Surr)	*110*		*69 - 122*
Dibromofluoromethane (Surr)	*99*		*78 - 129*

Lab Sample ID: MB 240-447867/8
Matrix: Water
Analysis Batch: 447867

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 17:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/19/20 17:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.56	ug/L			08/19/20 17:38	1
1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41	ug/L			08/19/20 17:38	1
1,1-Dichloroethane	1.0	U	1.0	0.41	ug/L			08/19/20 17:38	1
1,1-Dichloroethene	1.0	U	1.0	0.46	ug/L			08/19/20 17:38	1
1,1-Dichloropropene	1.0	U	1.0	0.37	ug/L			08/19/20 17:38	1
1,2,3-Trichlorobenzene	1.0	U	1.0	0.54	ug/L			08/19/20 17:38	1
1,2,3-Trichloropropane	1.0	U	1.0	0.51	ug/L			08/19/20 17:38	1
1,2,3-Trimethylbenzene	5.0	U	5.0	0.36	ug/L			08/19/20 17:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.81	ug/L			08/19/20 17:38	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 17:38	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.91	ug/L			08/19/20 17:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			08/19/20 17:38	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			08/19/20 17:38	1
1,2-Dichloropropane	1.0	U	1.0	0.37	ug/L			08/19/20 17:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.40	ug/L			08/19/20 17:38	1
1,3-Dichloropropane	1.0	U	1.0	0.21	ug/L			08/19/20 17:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			08/19/20 17:38	1
2,2-Dichloropropane	1.0	U	1.0	0.95	ug/L			08/19/20 17:38	1
2-Chloroethyl vinyl ether	10	U	10	1.1	ug/L			08/19/20 17:38	1
2-Chlorotoluene	1.0	U	1.0	0.42	ug/L			08/19/20 17:38	1
2-Hexanone	5.0	U	5.0	2.1	ug/L			08/19/20 17:38	1
Bromobenzene	1.0	U	1.0	0.38	ug/L			08/19/20 17:38	1
Bromochloromethane	1.0	U	1.0	0.52	ug/L			08/19/20 17:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447867/8
Matrix: Water
Analysis Batch: 447867

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	1.0	U	1.0	0.44	ug/L			08/19/20 17:38	1
p-Isopropyltoluene	1.0	U	1.0	0.49	ug/L			08/19/20 17:38	1
Acetone	5.0	U	5.0	5.4	ug/L			08/19/20 17:38	1
Benzene	1.0	U	1.0	0.38	ug/L			08/19/20 17:38	1
Bromoform	1.0	U	1.0	0.76	ug/L			08/19/20 17:38	1
Bromomethane	1.0	U	1.0	0.42	ug/L			08/19/20 17:38	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			08/19/20 17:38	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			08/19/20 17:38	1
Chlorobenzene	1.0	U	1.0	0.32	ug/L			08/19/20 17:38	1
Chloroethane	1.0	U	1.0	0.83	ug/L			08/19/20 17:38	1
Chloroform	1.0	U	1.0	0.40	ug/L			08/19/20 17:38	1
Chloromethane	1.0	U	1.0	0.64	ug/L			08/19/20 17:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/19/20 17:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			08/19/20 17:38	1
Hexachlorobutadiene	1.0	U	1.0	0.83	ug/L			08/19/20 17:38	1
Dibromomethane	1.0	U	1.0	0.33	ug/L			08/19/20 17:38	1
Bromodichloromethane	1.0	U	1.0	0.35	ug/L			08/19/20 17:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			08/19/20 17:38	1
Ethylbenzene	1.0	U	1.0	0.39	ug/L			08/19/20 17:38	1
1,2-Dibromoethane	1.0	U	1.0	0.37	ug/L			08/19/20 17:38	1
Diisopropyl ether	5.0	U	5.0	0.36	ug/L			08/19/20 17:38	1
Naphthalene	1.0	U	1.0	0.82	ug/L			08/19/20 17:38	1
m-Xylene & p-Xylene	2.0	U	2.0	0.40	ug/L			08/19/20 17:38	1
n-Butylbenzene	1.0	U	1.0	0.59	ug/L			08/19/20 17:38	1
Isopropylbenzene	1.0	U	1.0	0.45	ug/L			08/19/20 17:38	1
n-Propylbenzene	1.0	U	1.0	0.46	ug/L			08/19/20 17:38	1
2-Butanone	5.0	U	5.0	2.4	ug/L			08/19/20 17:38	1
4-Methyl-2-pentanone	5.0	U	5.0	2.1	ug/L			08/19/20 17:38	1
sec-Butylbenzene	1.0	U	1.0	0.63	ug/L			08/19/20 17:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.44	ug/L			08/19/20 17:38	1
Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39	ug/L			08/19/20 17:38	1
Methylene Chloride	5.0	U	5.0	1.3	ug/L			08/19/20 17:38	1
o-Xylene	1.0	U	1.0	0.43	ug/L			08/19/20 17:38	1
Styrene	1.0	U	1.0	0.40	ug/L			08/19/20 17:38	1
Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43	ug/L			08/19/20 17:38	1
tert-Butylbenzene	1.0	U	1.0	0.51	ug/L			08/19/20 17:38	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/19/20 17:38	1
Toluene	1.0	U	1.0	0.35	ug/L			08/19/20 17:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/19/20 17:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			08/19/20 17:38	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/19/20 17:38	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			08/19/20 17:38	1
Vinyl acetate	2.0	U	2.0	0.78	ug/L			08/19/20 17:38	1
Vinyl chloride	0.50	U	0.50	0.50	ug/L			08/19/20 17:38	1
tert-Butyl alcohol	20	U	20	1.7	ug/L			08/19/20 17:38	1
Xylenes, Total	2.0	U	2.0	0.42	ug/L			08/19/20 17:38	1
Dibromochloromethane	1.0	U	1.0	0.39	ug/L			08/19/20 17:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 240-447867/8
Matrix: Water
Analysis Batch: 447867

Client Sample ID: Method Blank
Prep Type: Total/NA

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/19/20 17:38	1
Tetrahydrofuran	31.5		ug/L		4.37	109-99-9		08/19/20 17:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		75 - 130		08/19/20 17:38	1
4-Bromofluorobenzene (Surr)	101		47 - 134		08/19/20 17:38	1
Toluene-d8 (Surr)	96		69 - 122		08/19/20 17:38	1
Dibromofluoromethane (Surr)	83		78 - 129		08/19/20 17:38	1

Lab Sample ID: LCS 240-447867/5
Matrix: Water
Analysis Batch: 447867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	20.5		ug/L		102	77 - 120
1,1,1-Trichloroethane	20.0	19.8		ug/L		99	65 - 141
1,1,2,2-Tetrachloroethane	20.0	21.4		ug/L		107	45 - 151
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.7		ug/L		108	54 - 148
1,1-Dichloroethane	20.0	20.7		ug/L		103	74 - 126
1,1-Dichloroethene	20.0	21.1		ug/L		105	73 - 129
1,1-Dichloropropene	20.0	20.7		ug/L		104	78 - 120
1,2,3-Trichlorobenzene	20.0	23.0		ug/L		115	42 - 126
1,2,3-Trichloropropane	20.0	21.0		ug/L		105	57 - 137
1,2,4-Trichlorobenzene	20.0	22.7		ug/L		113	47 - 120
1,2,4-Trimethylbenzene	20.0	21.6		ug/L		108	66 - 129
1,2-Dibromo-3-Chloropropane	20.0	23.5		ug/L		118	34 - 136
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	74 - 120
1,2-Dichloroethane	20.0	18.3		ug/L		92	66 - 129
1,2-Dichloropropane	20.0	21.5		ug/L		107	79 - 127
1,3-Dichlorobenzene	20.0	21.0		ug/L		105	74 - 120
1,3-Dichloropropane	20.0	20.5		ug/L		102	74 - 122
1,4-Dichlorobenzene	20.0	20.3		ug/L		102	75 - 120
2,2-Dichloropropane	20.0	19.4		ug/L		97	67 - 137
2-Chloroethyl vinyl ether	20.0	44.3	*	ug/L		221	29 - 146
2-Chlorotoluene	20.0	21.2		ug/L		106	73 - 126
2-Hexanone	40.0	45.2		ug/L		113	43 - 142
Bromobenzene	20.0	21.0		ug/L		105	77 - 120
Bromochloromethane	20.0	18.4		ug/L		92	70 - 128
4-Chlorotoluene	20.0	21.0		ug/L		105	73 - 126
p-Isopropyltoluene	20.0	23.0		ug/L		115	66 - 127
Acetone	40.0	43.5		ug/L		109	33 - 155
Benzene	20.0	19.7		ug/L		99	77 - 123
Bromoform	20.0	21.4		ug/L		107	47 - 133
Bromomethane	20.0	18.4		ug/L		92	48 - 144
Carbon disulfide	20.0	21.6		ug/L		108	67 - 127
Carbon tetrachloride	20.0	20.0		ug/L		100	61 - 142
Chlorobenzene	20.0	20.7		ug/L		104	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-447867/5
Matrix: Water
Analysis Batch: 447867

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	20.0	19.1		ug/L		96	41 - 147
Chloroform	20.0	18.5		ug/L		92	74 - 127
Chloromethane	20.0	22.4		ug/L		112	46 - 148
cis-1,2-Dichloroethene	20.0	17.0		ug/L		85	75 - 124
cis-1,3-Dichloropropene	20.0	21.2		ug/L		106	68 - 128
Hexachlorobutadiene	20.0	22.1		ug/L		110	40 - 120
Dibromomethane	20.0	18.7		ug/L		94	67 - 121
Bromodichloromethane	20.0	20.0		ug/L		100	73 - 122
Dichlorodifluoromethane	20.0	23.9		ug/L		119	35 - 137
Ethylbenzene	20.0	21.9		ug/L		109	80 - 120
1,2-Dibromoethane	20.0	20.1		ug/L		101	73 - 120
Naphthalene	20.0	24.0		ug/L		120	28 - 130
m-Xylene & p-Xylene	20.0	22.0		ug/L		110	79 - 121
n-Butylbenzene	20.0	23.1		ug/L		116	54 - 129
Isopropylbenzene	20.0	21.6		ug/L		108	73 - 123
n-Propylbenzene	20.0	23.1		ug/L		116	67 - 130
2-Butanone	40.0	40.6		ug/L		102	41 - 151
4-Methyl-2-pentanone	40.0	43.4		ug/L		109	43 - 145
sec-Butylbenzene	20.0	22.2		ug/L		111	60 - 131
Methyl tert-butyl ether	20.0	20.0		ug/L		100	57 - 127
Methylene Chloride	20.0	21.5		ug/L		107	63 - 134
o-Xylene	20.0	20.7		ug/L		104	75 - 123
Styrene	20.0	21.3		ug/L		106	75 - 121
tert-Butylbenzene	20.0	22.4		ug/L		112	63 - 126
Tetrachloroethene	20.0	20.3		ug/L		101	70 - 125
Toluene	20.0	20.2		ug/L		101	79 - 122
trans-1,2-Dichloroethene	20.0	21.9		ug/L		109	74 - 130
trans-1,3-Dichloropropene	20.0	21.1		ug/L		106	64 - 120
Trichloroethene	20.0	20.6		ug/L		103	71 - 121
Trichlorofluoromethane	20.0	19.1		ug/L		96	52 - 148
Vinyl acetate	20.0	18.5		ug/L		93	44 - 160
Vinyl chloride	20.0	21.9		ug/L		109	61 - 134
tert-Butyl alcohol	200	234		ug/L		117	15 - 169
Xylenes, Total	40.0	42.7		ug/L		107	78 - 122
Dibromochloromethane	20.0	20.1		ug/L		100	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 130*
4-Bromofluorobenzene (Surr)	*107*		*47 - 134*
Toluene-d8 (Surr)	*100*		*69 - 122*
Dibromofluoromethane (Surr)	*89*		*78 - 129*

GC/MS VOA

Analysis Batch: 447281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134931-20	MSA-SW42D-081220	Total/NA	Water	8260C	
240-134931-21	MSA-SW43A-081220	Total/NA	Water	8260C	
240-134931-22	MSA-SW43B-081220	Total/NA	Water	8260C	
240-134931-23	MSA-SW43C-081220	Total/NA	Water	8260C	
240-134931-24	MSA-SW43D-081220	Total/NA	Water	8260C	
240-134931-25	MSA-SW44A-081220	Total/NA	Water	8260C	
240-134931-26	MSA-SW44B-081220	Total/NA	Water	8260C	
240-134931-27	MSA-SW44C-081220	Total/NA	Water	8260C	
240-134931-28	MSA-SW44D-081220	Total/NA	Water	8260C	
240-134931-29	TB-081220	Total/NA	Water	8260C	
MB 240-447281/8	Method Blank	Total/NA	Water	8260C	
LCS 240-447281/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 447506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134931-1	MSA-SW37A-081220	Total/NA	Water	8260C	
240-134931-2	MSA-SW37B-081220	Total/NA	Water	8260C	
240-134931-3	MSA-SW37C-081220	Total/NA	Water	8260C	
240-134931-4	MSA-SW37D-081220	Total/NA	Water	8260C	
240-134931-5	MSA-SW38A-081220	Total/NA	Water	8260C	
240-134931-6	MSA-SW38B-081220	Total/NA	Water	8260C	
240-134931-7	MSA-SW38C-081220	Total/NA	Water	8260C	
240-134931-8	MSA-SW38D-081220	Total/NA	Water	8260C	
240-134931-9	MSA-SW40A-081220	Total/NA	Water	8260C	
240-134931-10	MSA-SW40B-081220	Total/NA	Water	8260C	
240-134931-18	MSA-SW42B-081220	Total/NA	Water	8260C	
240-134931-19	MSA-SW42C-081220	Total/NA	Water	8260C	
240-134931-30	MSA-SW46A-081220	Total/NA	Water	8260C	
240-134931-31	MSA-SW47A-081220	Total/NA	Water	8260C	
240-134931-32	MSA-SW48A-081220	Total/NA	Water	8260C	
240-134931-33	MSA-SW49A-081220	Total/NA	Water	8260C	
MB 240-447506/8	Method Blank	Total/NA	Water	8260C	
LCS 240-447506/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 447698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134931-1	MSA-SW37A-081220	Total/NA	Water	8260C	
240-134931-2	MSA-SW37B-081220	Total/NA	Water	8260C	
240-134931-3	MSA-SW37C-081220	Total/NA	Water	8260C	
240-134931-4	MSA-SW37D-081220	Total/NA	Water	8260C	
240-134931-5	MSA-SW38A-081220	Total/NA	Water	8260C	
240-134931-6	MSA-SW38B-081220	Total/NA	Water	8260C	
240-134931-8	MSA-SW38D-081220	Total/NA	Water	8260C	
240-134931-9	MSA-SW40A-081220	Total/NA	Water	8260C	
240-134931-10	MSA-SW40B-081220	Total/NA	Water	8260C	
240-134931-11	MSA-SW40C-081220	Total/NA	Water	8260C	
240-134931-12	MSA-SW40D-081220	Total/NA	Water	8260C	
240-134931-13	MSA-SW41A-081220	Total/NA	Water	8260C	
240-134931-14	MSA-SW41B-081220	Total/NA	Water	8260C	
240-134931-15	MSA-SW41C-081220	Total/NA	Water	8260C	
240-134931-18	MSA-SW42B-081220	Total/NA	Water	8260C	

GC/MS VOA (Continued)

Analysis Batch: 447698 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134931-19	MSA-SW42C-081220	Total/NA	Water	8260C	
240-134931-30	MSA-SW46A-081220	Total/NA	Water	8260C	
240-134931-31	MSA-SW47A-081220	Total/NA	Water	8260C	
240-134931-32	MSA-SW48A-081220	Total/NA	Water	8260C	
240-134931-33	MSA-SW49A-081220	Total/NA	Water	8260C	
MB 240-447698/8	Method Blank	Total/NA	Water	8260C	
LCS 240-447698/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 447867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134931-16	MSA-SW41D-081220	Total/NA	Water	8260C	
240-134931-17	MSA-SW42A-081220	Total/NA	Water	8260C	
MB 240-447867/8	Method Blank	Total/NA	Water	8260C	
LCS 240-447867/5	Lab Control Sample	Total/NA	Water	8260C	

Client Sample ID: MSA-SW37A-081220
Lab Sample ID: 240-134931-1
Date Collected: 08/12/20 10:18
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/17/20 22:37	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 21:19	TJL1	TAL CAN

Client Sample ID: MSA-SW37B-081220
Lab Sample ID: 240-134931-2
Date Collected: 08/12/20 10:21
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/17/20 22:59	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 21:42	TJL1	TAL CAN

Client Sample ID: MSA-SW37C-081220
Lab Sample ID: 240-134931-3
Date Collected: 08/12/20 10:23
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/17/20 23:22	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 22:04	TJL1	TAL CAN

Client Sample ID: MSA-SW37D-081220
Lab Sample ID: 240-134931-4
Date Collected: 08/12/20 10:25
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/17/20 23:44	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 22:27	TJL1	TAL CAN

Client Sample ID: MSA-SW38A-081220
Lab Sample ID: 240-134931-5
Date Collected: 08/12/20 09:33
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 00:06	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 22:49	TJL1	TAL CAN

Client Sample ID: MSA-SW38B-081220
Lab Sample ID: 240-134931-6
Date Collected: 08/12/20 09:36
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 00:29	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 23:12	TJL1	TAL CAN

Client Sample ID: MSA-SW38C-081220
Lab Sample ID: 240-134931-7
Date Collected: 08/12/20 09:39
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 00:51	TJL1	TAL CAN

Client Sample ID: MSA-SW38D-081220
Lab Sample ID: 240-134931-8
Date Collected: 08/12/20 09:41
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 01:14	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 23:34	TJL1	TAL CAN

Client Sample ID: MSA-SW40A-081220
Lab Sample ID: 240-134931-9
Date Collected: 08/12/20 09:51
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 01:36	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/18/20 23:56	TJL1	TAL CAN

Client Sample ID: MSA-SW40B-081220
Lab Sample ID: 240-134931-10
Date Collected: 08/12/20 09:53
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 01:59	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 00:18	TJL1	TAL CAN

Client Sample ID: MSA-SW40C-081220
Lab Sample ID: 240-134931-11
Date Collected: 08/12/20 09:56
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447698	08/19/20 02:55	TJL1	TAL CAN

Client Sample ID: MSA-SW40D-081220
Lab Sample ID: 240-134931-12
Date Collected: 08/12/20 00:09
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447698	08/19/20 03:18	TJL1	TAL CAN

Client Sample ID: MSA-SW41A-081220
Lab Sample ID: 240-134931-13
Date Collected: 08/12/20 09:17
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447698	08/19/20 03:40	TJL1	TAL CAN

Client Sample ID: MSA-SW41B-081220
Lab Sample ID: 240-134931-14
Date Collected: 08/12/20 09:20
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447698	08/19/20 04:02	TJL1	TAL CAN

Client Sample ID: MSA-SW41C-081220
Lab Sample ID: 240-134931-15
Date Collected: 08/12/20 09:22
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447698	08/19/20 04:24	TJL1	TAL CAN

Client Sample ID: MSA-SW41D-081220
Lab Sample ID: 240-134931-16
Date Collected: 08/12/20 09:25
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447867	08/20/20 02:37	TJL1	TAL CAN

Client Sample ID: MSA-SW42A-081220
Lab Sample ID: 240-134931-17
Date Collected: 08/12/20 10:06
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447867	08/20/20 03:00	TJL1	TAL CAN

Client Sample ID: MSA-SW42B-081220
Lab Sample ID: 240-134931-18
Date Collected: 08/12/20 10:08
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 02:21	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 00:41	TJL1	TAL CAN

Client Sample ID: MSA-SW42C-081220
Lab Sample ID: 240-134931-19
Date Collected: 08/12/20 10:10
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 02:44	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 01:03	TJL1	TAL CAN

Client Sample ID: MSA-SW42D-081220
Lab Sample ID: 240-134931-20
Date Collected: 08/12/20 10:13
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/14/20 23:20	TJL1	TAL CAN

Client Sample ID: MSA-SW43A-081220
Lab Sample ID: 240-134931-21
Date Collected: 08/12/20 09:03
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/14/20 23:42	TJL1	TAL CAN

Client Sample ID: MSA-SW43B-081220
Lab Sample ID: 240-134931-22
Date Collected: 08/12/20 09:05
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 00:04	TJL1	TAL CAN

Client Sample ID: MSA-SW43C-081220
Lab Sample ID: 240-134931-23
Date Collected: 08/12/20 09:07
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 00:27	TJL1	TAL CAN

Client Sample ID: MSA-SW43D-081220
Lab Sample ID: 240-134931-24
Date Collected: 08/12/20 09:10
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 00:49	TJL1	TAL CAN

Client Sample ID: MSA-SW44A-081220
Lab Sample ID: 240-134931-25
Date Collected: 08/12/20 08:47
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 01:12	TJL1	TAL CAN

Client Sample ID: MSA-SW44B-081220
Lab Sample ID: 240-134931-26
Date Collected: 08/12/20 08:51
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 01:34	TJL1	TAL CAN

Client Sample ID: MSA-SW44C-081220
Lab Sample ID: 240-134931-27
Date Collected: 08/12/20 08:54
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 01:57	TJL1	TAL CAN

Client Sample ID: MSA-SW44D-081220
Lab Sample ID: 240-134931-28
Date Collected: 08/12/20 08:58
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 02:19	TJL1	TAL CAN

Client Sample ID: TB-081220
Lab Sample ID: 240-134931-29
Date Collected: 08/12/20 00:00
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447281	08/15/20 02:41	TJL1	TAL CAN

Client Sample ID: MSA-SW46A-081220
Lab Sample ID: 240-134931-30
Date Collected: 08/12/20 10:02
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 03:06	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 01:26	TJL1	TAL CAN

Client Sample ID: MSA-SW47A-081220
Lab Sample ID: 240-134931-31
Date Collected: 08/12/20 09:46
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 03:28	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 01:48	TJL1	TAL CAN

Client Sample ID: MSA-SW48A-081220
Lab Sample ID: 240-134931-32
Date Collected: 08/12/20 09:29
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 03:51	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 02:10	TJL1	TAL CAN

Client Sample ID: MSA-SW49A-081220
Lab Sample ID: 240-134931-33
Date Collected: 08/12/20 09:14
Matrix: Water
Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	447506	08/18/20 04:13	TJL1	TAL CAN
Total/NA	Analysis	8260C		1	447698	08/19/20 02:32	TJL1	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20 *
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MSA Surface Water

Job ID: 240-134931-1
SDG: MSA Frog Mortar Creek

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

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: 240-134931-1
SDG: MSA Frog Mortar Creek

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-134931-1	MSA-SW37A-081220	Water	08/12/20 10:18	08/13/20 10:30	
240-134931-2	MSA-SW37B-081220	Water	08/12/20 10:21	08/13/20 10:30	
240-134931-3	MSA-SW37C-081220	Water	08/12/20 10:23	08/13/20 10:30	
240-134931-4	MSA-SW37D-081220	Water	08/12/20 10:25	08/13/20 10:30	
240-134931-5	MSA-SW38A-081220	Water	08/12/20 09:33	08/13/20 10:30	
240-134931-6	MSA-SW38B-081220	Water	08/12/20 09:36	08/13/20 10:30	
240-134931-7	MSA-SW38C-081220	Water	08/12/20 09:39	08/13/20 10:30	
240-134931-8	MSA-SW38D-081220	Water	08/12/20 09:41	08/13/20 10:30	
240-134931-9	MSA-SW40A-081220	Water	08/12/20 09:51	08/13/20 10:30	
240-134931-10	MSA-SW40B-081220	Water	08/12/20 09:53	08/13/20 10:30	
240-134931-11	MSA-SW40C-081220	Water	08/12/20 09:56	08/13/20 10:30	
240-134931-12	MSA-SW40D-081220	Water	08/12/20 00:09	08/13/20 10:30	
240-134931-13	MSA-SW41A-081220	Water	08/12/20 09:17	08/13/20 10:30	
240-134931-14	MSA-SW41B-081220	Water	08/12/20 09:20	08/13/20 10:30	
240-134931-15	MSA-SW41C-081220	Water	08/12/20 09:22	08/13/20 10:30	
240-134931-16	MSA-SW41D-081220	Water	08/12/20 09:25	08/13/20 10:30	
240-134931-17	MSA-SW42A-081220	Water	08/12/20 10:06	08/13/20 10:30	
240-134931-18	MSA-SW42B-081220	Water	08/12/20 10:08	08/13/20 10:30	
240-134931-19	MSA-SW42C-081220	Water	08/12/20 10:10	08/13/20 10:30	
240-134931-20	MSA-SW42D-081220	Water	08/12/20 10:13	08/13/20 10:30	
240-134931-21	MSA-SW43A-081220	Water	08/12/20 09:03	08/13/20 10:30	
240-134931-22	MSA-SW43B-081220	Water	08/12/20 09:05	08/13/20 10:30	
240-134931-23	MSA-SW43C-081220	Water	08/12/20 09:07	08/13/20 10:30	
240-134931-24	MSA-SW43D-081220	Water	08/12/20 09:10	08/13/20 10:30	
240-134931-25	MSA-SW44A-081220	Water	08/12/20 08:47	08/13/20 10:30	
240-134931-26	MSA-SW44B-081220	Water	08/12/20 08:51	08/13/20 10:30	
240-134931-27	MSA-SW44C-081220	Water	08/12/20 08:54	08/13/20 10:30	
240-134931-28	MSA-SW44D-081220	Water	08/12/20 08:58	08/13/20 10:30	
240-134931-29	TB-081220	Water	08/12/20 00:00	08/13/20 10:30	
240-134931-30	MSA-SW46A-081220	Water	08/12/20 10:02	08/13/20 10:30	
240-134931-31	MSA-SW47A-081220	Water	08/12/20 09:46	08/13/20 10:30	
240-134931-32	MSA-SW48A-081220	Water	08/12/20 09:29	08/13/20 10:30	
240-134931-33	MSA-SW49A-081220	Water	08/12/20 09:14	08/13/20 10:30	

Quantitation Limit Exceptions Summary

Client: Tetra Tech, Inc. Job ID: 240-134931-1
Project/Site: MSA Surface Water SDG: MSA Frog Mortar Creek

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Analyte	Matrix	Prep Type	Unit	Client RL	Lab PQL
8260C	2-Butanone	Water	Total/NA	ug/L	5.0	10
8260C	2-Hexanone	Water	Total/NA	ug/L	5.0	10
8260C	4-Methyl-2-pentanone	Water	Total/NA	ug/L	5.0	10
8260C	Acetone	Water	Total/NA	ug/L	5.0	10
8260C	Diisopropyl ether	Water	Total/NA	ug/L	5.0	10
8260C	tert-Butyl alcohol	Water	Total/NA	ug/L	20	40
8260C	Vinyl chloride	Water	Total/NA	ug/L	0.50	1

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Analysis Batch Number: 378870

Lab Sample ID: STD8260 240-378870/8 IC Client Sample ID:

Date Analyzed: 04/30/19 14:10 Lab File ID: U1269795.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2,3-Trichloropropane		Invalid Compound ID	laveyt	04/30/19 15:28
1,2-Dibromo-3-Chloropropane		Invalid Compound ID	laveyt	04/30/19 15:29
2-Butanone		Invalid Compound ID	laveyt	04/30/19 15:25
2-Hexanone		Invalid Compound ID	laveyt	04/30/19 15:27
4-Methyl-2-pentanone		Invalid Compound ID	laveyt	04/30/19 15:26
Acetone		Invalid Compound ID	laveyt	04/30/19 15:23
Acrolein		Invalid Compound ID	laveyt	04/30/19 15:23
Acrylonitrile		Invalid Compound ID	laveyt	04/30/19 15:24
Isobutyl alcohol		Invalid Compound ID	laveyt	04/30/19 15:25
Methyl acetate		Invalid Compound ID	laveyt	04/30/19 15:24
tert-Butyl alcohol		Invalid Compound ID	laveyt	04/30/19 15:24
Tetrahydrofuran		Invalid Compound ID	laveyt	04/30/19 15:25
trans-1,4-Dichloro-2-butene		Invalid Compound ID	laveyt	04/30/19 15:28
Vinyl acetate		Invalid Compound ID	laveyt	04/30/19 15:25

Lab Sample ID: STD8260 240-378870/13 I Client Sample ID:

Date Analyzed: 04/30/19 16:02 Lab File ID: U1269800.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.58	Split Peak	laveyt	04/30/19 16:22

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Analysis Batch Number: 378870

Lab Sample ID: STD8260 240-378870/14 I Client Sample ID:

Date Analyzed: 04/30/19 16:24 Lab File ID: U1269801.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)		Invalid Compound ID	laveyt	04/30/19 16:51
4-Bromofluorobenzene (Surr)		Invalid Compound ID	laveyt	04/30/19 16:52
Acetone		Invalid Compound ID	laveyt	04/30/19 16:45
Chloromethane		Invalid Compound ID	laveyt	04/30/19 16:44
Dibromofluoromethane (Surr)		Invalid Compound ID	laveyt	04/30/19 16:51
Methylene Chloride		Invalid Compound ID	laveyt	04/30/19 16:46
n-Heptane		Invalid Compound ID	laveyt	04/30/19 16:54
Toluene-d8 (Surr)		Invalid Compound ID	laveyt	04/30/19 16:52

Lab Sample ID: ICV 240-378870/15 Client Sample ID:

Date Analyzed: 04/30/19 16:46 Lab File ID: U1269802.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.59	Split Peak	laveyt	04/30/19 17:05

Lab Sample ID: STDA9 240-378870/24 IC Client Sample ID:

Date Analyzed: 04/30/19 20:05 Lab File ID: U1269811.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Methylnaphthalene		Invalid Compound ID	laveyt	05/01/19 13:31
Acetonitrile		Invalid Compound ID	laveyt	05/01/19 13:28
Cyclohexanone		Invalid Compound ID	laveyt	05/01/19 13:29
n-Butanol		Invalid Compound ID	laveyt	05/01/19 13:29
Propionitrile		Invalid Compound ID	laveyt	05/01/19 13:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Analysis Batch Number: 442963

Lab Sample ID: STD8260 240-442963/9 IC Client Sample ID:

Date Analyzed: 07/16/20 17:43 Lab File ID: U1279113.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Chloroethyl vinyl ether	6.09	Invalid Compound ID	laveyt	07/16/20 20:34
4-Methyl-2-pentanone	6.35	Invalid Compound ID	laveyt	07/16/20 20:54
1,2-Dichloroethane-d4 (Surr)		Invalid Compound ID	laveyt	07/16/20 20:28
1,4-Dioxane		Invalid Compound ID	laveyt	07/16/20 20:33
2-Hexanone		Invalid Compound ID	laveyt	07/16/20 20:55
4-Bromofluorobenzene (Surr)		Invalid Compound ID	laveyt	07/16/20 20:28
Acetone		Invalid Compound ID	laveyt	07/16/20 18:54
Chloromethane		Invalid Compound ID	laveyt	07/16/20 20:36
Dibromofluoromethane (Surr)		Invalid Compound ID	laveyt	07/16/20 20:28
Hexane		Invalid Compound ID	laveyt	07/16/20 20:37
n-Heptane		Invalid Compound ID	laveyt	07/16/20 18:56
tert-Butyl alcohol		Invalid Compound ID	laveyt	07/16/20 21:11
Toluene-d8 (Surr)		Invalid Compound ID	laveyt	07/16/20 18:52
Vinyl acetate		Invalid Compound ID	laveyt	07/16/20 20:37

Lab Sample ID: STD8260 240-442963/10 I Client Sample ID:

Date Analyzed: 07/16/20 18:05 Lab File ID: U1279114.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)		Invalid Compound ID	laveyt	07/16/20 20:29
4-Bromofluorobenzene (Surr)		Invalid Compound ID	laveyt	07/16/20 20:29
Dibromofluoromethane (Surr)		Invalid Compound ID	laveyt	07/16/20 20:29
Toluene-d8 (Surr)		Invalid Compound ID	laveyt	07/16/20 20:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Analysis Batch Number: 442963

Lab Sample ID: STD8260 240-442963/12 I Client Sample ID:

Date Analyzed: 07/16/20 18:50 Lab File ID: U1279116.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.58	Split Peak	laveyt	07/16/20 19:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Analysis Batch Number: 447867

Lab Sample ID: MB 240-447867/8 Client Sample ID:

Date Analyzed: 08/19/20 17:38 Lab File ID: U1279812.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone		Invalid Compound ID	laveyt	08/19/20 18:37

Lab Sample ID: 240-134931-16 Client Sample ID: MSA-SW41D-081220

Date Analyzed: 08/20/20 02:37 Lab File ID: U1279836.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone		Invalid Compound ID	laveyt	08/20/20 15:04

Lab Sample ID: 240-134931-17 Client Sample ID: MSA-SW42A-081220

Date Analyzed: 08/20/20 03:00 Lab File ID: U1279837.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/20/20 15:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Analysis Batch Number: 337766

Lab Sample ID: STD8260 240-337766/13 I Client Sample ID:

Date Analyzed: 07/24/18 20:04 Lab File ID: U1900794.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Invalid Compound ID	laveyt	07/25/18 10:11
Acetone		Invalid Compound ID	laveyt	07/25/18 09:52
Bromoform		Invalid Compound ID	laveyt	07/25/18 09:54
Methylene Chloride		Invalid Compound ID	laveyt	07/25/18 09:52
n-Heptane		Invalid Compound ID	laveyt	07/25/18 09:54
tert-Butyl alcohol		Invalid Compound ID	laveyt	07/25/18 09:53
1,3-Dichlorobenzene	10.81	Peak assignment corrected	laveyt	07/25/18 09:51

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Analysis Batch Number: 342719

Lab Sample ID: STD8260 240-342719/13 I Client Sample ID:

Date Analyzed: 08/27/18 19:23 Lab File ID: U1901329.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Invalid Compound ID	laveyt	08/27/18 19:49
Acetone		Invalid Compound ID	laveyt	08/27/18 19:48
Methylene Chloride		Invalid Compound ID	laveyt	08/27/18 19:48
Naphthalene		Invalid Compound ID	laveyt	08/27/18 20:00
n-Heptane		Invalid Compound ID	laveyt	08/27/18 19:48
Tetrahydrofuran		Invalid Compound ID	laveyt	08/27/18 19:48
trans-1,4-Dichloro-2-butene		Invalid Compound ID	laveyt	08/27/18 19:50
1,3-Dichlorobenzene	10.82	Peak assignment corrected	laveyt	08/27/18 19:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Analysis Batch Number: 447281

Lab Sample ID: 240-134931-22 Client Sample ID: MSA-SW43B-081220

Date Analyzed: 08/15/20 00:04 Lab File ID: U1916377.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride		Invalid Compound ID	laveyt	08/17/20 14:42

Lab Sample ID: 240-134931-24 Client Sample ID: MSA-SW43D-081220

Date Analyzed: 08/15/20 00:49 Lab File ID: U1916379.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride		Invalid Compound ID	laveyt	08/17/20 14:43

Lab Sample ID: 240-134931-25 Client Sample ID: MSA-SW44A-081220

Date Analyzed: 08/15/20 01:12 Lab File ID: U1916380.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/17/20 14:43
Chloromethane		Invalid Compound ID	laveyt	08/17/20 14:43

Lab Sample ID: 240-134931-29 Client Sample ID: TB-081220

Date Analyzed: 08/15/20 02:41 Lab File ID: U1916384.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/17/20 14:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Analysis Batch Number: 447506

Lab Sample ID: 240-134931-1 Client Sample ID: MSA-SW37A-081220

Date Analyzed: 08/17/20 22:37 Lab File ID: U1916404.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/18/20 14:45

Lab Sample ID: 240-134931-7 Client Sample ID: MSA-SW38C-081220

Date Analyzed: 08/18/20 00:51 Lab File ID: U1916410.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/18/20 14:48

Lab Sample ID: 240-134931-8 Client Sample ID: MSA-SW38D-081220

Date Analyzed: 08/18/20 01:14 Lab File ID: U1916411.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butyl alcohol		Invalid Compound ID	laveyt	08/18/20 14:48

Lab Sample ID: 240-134931-10 Client Sample ID: MSA-SW40B-081220

Date Analyzed: 08/18/20 01:59 Lab File ID: U1916413.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/18/20 14:49

Lab Sample ID: 240-134931-18 Client Sample ID: MSA-SW42B-081220

Date Analyzed: 08/18/20 02:21 Lab File ID: U1916414.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/18/20 14:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Analysis Batch Number: 447506

Lab Sample ID: 240-134931-32 Client Sample ID: MSA-SW48A-081220

Date Analyzed: 08/18/20 03:51 Lab File ID: U1916418.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/18/20 14:52

Lab Sample ID: 240-134931-33 Client Sample ID: MSA-SW49A-081220

Date Analyzed: 08/18/20 04:13 Lab File ID: U1916419.d GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Hexanone		Invalid Compound ID	laveyt	08/18/20 14:53
Chloromethane		Invalid Compound ID	laveyt	08/18/20 14:53

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm50is_stk_A_00001	11/14/18	05/14/18	MEOH, Lot 191720	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50is_stk_A_00003	05/19/19	11/19/18	MEOH, Lot 196628	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50is_stk_a_00006	08/06/20	02/06/20	MEOH, Lot 230446	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50is_stk_a_00007	02/07/21	08/07/20	MEOH, Lot 230446	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50ss_00329	07/27/18	07/20/18	MEOH, Lot na	4 mL	vm50ss_stk_00078	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00333	08/29/18	08/22/18	MEOH, Lot na	4 mL	vm50ss_stk_00078	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00362	04/30/19	04/23/19	MEOH, Lot na	4 mL	vm50ss_stk_00080	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00080	08/20/19	02/20/19	MEOH, Lot 0000196628	200 mL	VM567650_00030	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00030	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00410	07/16/20	07/09/20	MEOH, Lot na	5 mL	vm50ss_stk_00085	5 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00085	11/21/20	05/21/20	MEOH, Lot 0000230446	200 mL	VM567650_00032	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00032	07/30/23		Restek, Lot A0139582		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00077	09/27/18	03/27/18	MEOH, Lot 0000136118	200 mL	VM567650_00027	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00027	07/31/21		Restek, Lot A0120212		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00080	08/20/19	02/20/19	MEOH, Lot 0000196628	200 mL	VM567650_00030	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00030	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00085	11/21/20	05/21/20	MEOH, Lot 0000230446	200 mL	VM567650_00032	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VM567650_00032	07/30/23		Restek, Lot A0139582		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vmarolistdw_00256	07/26/18	07/19/18	MEOH, Lot na	4 mL	VMACROLSTD_00062	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00062	08/31/18	06/01/18	MEOH, Lot 178178	100 mL	VM568720_00028	1.25 mL	Acrolein	250 ug/mL
..VM568720_00028	08/31/18		restek, Lot A0135693		(Purchased Reagent)		Acrolein	20000 ug/mL
vmarolistdw_00260	08/27/18	08/20/18	MEOH, Lot na	4 mL	VMACROLSTD_00062	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00062	08/31/18	06/01/18	MEOH, Lot 178178	100 mL	VM568720_00028	1.25 mL	Acrolein	250 ug/mL
..VM568720_00028	08/31/18		restek, Lot A0135693		(Purchased Reagent)		Acrolein	20000 ug/mL
vmarolistdw_00294	04/30/19	04/25/19	MEOH, Lot na	5 mL	VMACROLSTD_00070	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00070	04/30/19	03/31/19	MEOH, Lot 0000196628	20 mL	VM568720_00032	0.25 mL	Acrolein	250 ug/mL
..VM568720_00032	05/31/19		restek, Lot A0143013		(Purchased Reagent)		Acrolein	20000 ug/mL
vmarolistdw_00352	07/16/20	07/09/20	MEOH, Lot na	5 mL	VMACROLSTD_00085	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00085	08/01/20	07/01/20	MEOH, Lot 0000230446	20 mL	VM568720_00037	0.25 mL	Acrolein	250 ug/mL
..VM568720_00037	04/30/21		restek, Lot A0154578		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00356	08/18/20	08/11/20	MEOH, Lot na	5 mL	VMACROLSTD_00086	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00086	10/30/20	07/30/20	MEOH, Lot 0000230446	20 mL	VM568720_00039	0.25 mL	Acrolein	250 ug/mL
..VM568720_00039	07/31/21		restek, Lot A0156861		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00357	08/26/20	08/19/20	MEOH, Lot na	5 mL	VMACROLSTD_00086	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00086	10/30/20	07/30/20	MEOH, Lot 0000230446	20 mL	VM568720_00039	0.25 mL	Acrolein	250 ug/mL
..VM568720_00039	07/31/21		restek, Lot A0156861		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00020							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21		restek, Lot A0120567		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00021							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21		restek, Lot A0120567		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00025							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00003	1.25 mL	BFB	50 ug/mL
.vm30026_00003	08/31/23		restek, Lot A0141187		(Purchased Reagent)		BFB	2000 ug/mL
VMFASA9W_00194	07/26/18	07/19/18	MEOH, Lot NA	4 mL	VMFASA9_00013	4 mL	Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
.VMFASA9_00013	09/30/18	05/01/18	MEOH, Lot 0000177891	100 mL	VM569727S_00002	2 mL	Cyclohexanone	500 ug/mL
					vm570806S_00003	4 mL	Pentachloroethane	100 ug/mL
					vm570807S_00003	4 mL	2-Methylnaphthalene	100 ug/mL
					VM570808S_00004	2 mL	1,2,3-Trimethylbenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809S_00004	2 mL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					VM571993S_00002	2 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
..VM569727S_00002	10/31/20		RESTEK, Lot A0131573		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806S_00003	03/31/22		Restek, Lot A0126373		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807S_00003	04/30/22		Restek, Lot A0126553		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808S_00004	09/30/18		Restek, Lot A0126195		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809S_00004	10/31/18		Restek, Lot A0126533		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
..VM571993S_00002	12/31/18		restek, Lot A0123771		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
VMFASAW_00246	08/31/18	08/24/18	MEOH, Lot NA	4 mL	VMFASA_00044	4 mL	Acrolein	250 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMFASA_00044	09/30/18	07/31/18	MEOH, Lot 0000196626	100 mL	VM568720S_00026	1.25 mL	Acrolein	250 ug/mL
..VM568720S_00026	09/30/18		restek, Lot A0135949		(Purchased Reagent)		Acrolein	20000 ug/mL
VMFASAW_00277	05/02/19	04/25/19	MEOH, Lot NA	5 mL	VMFASA_00052	5 mL	Acrolein	250 ug/mL
.VMFASA_00052	05/18/19	04/18/19	MEOH, Lot +201600000198123J7	100 mL	VM568720S_00030	1.25 mL	Acrolein	250 ug/mL
..VM568720S_00030	05/31/19		restek, Lot A0143084		(Purchased Reagent)		Acrolein	20000 ug/mL
VMFASAW_00336	07/23/20	07/16/20	MEOH, Lot NA	5 mL	VMFASA_00064	5 mL	Acrolein	250 ug/mL
.VMFASA_00064	10/09/20	07/09/20	MEOH, Lot 0000230446	100 mL	VM568720S_00036	1.25 mL	Acrolein	250 ug/mL
..VM568720S_00036	04/30/21		restek, Lot A0154553		(Purchased Reagent)		Acrolein	20000 ug/mL
VMFASGW_00271	08/28/18	08/21/18	MEOH, Lot NA	4 mL	VMFASG_00074	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00074	09/13/18	08/13/18	MEOH, Lot 0000196626	100 mL	vm569722S_00004	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00004	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00307	05/06/19	04/29/19	MEOH, Lot NA	5 mL	VMFASG_00082	5 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00082	05/21/19	04/21/19	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00367	07/16/20	07/09/20	MEOH, Lot NA	5 mL	VMFASG_00096	5 mL	Bromomethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00096	08/01/20	07/01/20	MEOH, Lot 0000230446	100 mL	vm569722S_00007	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00007	10/31/21		Restek, Lot A0142117		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00371	08/17/20	08/10/20	MEOH, Lot NA	5 mL	VMFASG_00097	5 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00097	09/03/20	08/03/20	MEOH, Lot 0000230446	100 mL	vm569722S_00007	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00007	10/31/21		Restek, Lot A0142117		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00372	08/25/20	08/18/20	MEOH, Lot NA	5 mL	VMFASG_00097	5 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00097	09/03/20	08/03/20	MEOH, Lot 0000230446	100 mL	vm569722S_00007	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..vm569722S_00007	10/31/21		Restek, Lot A0142117		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASPW_00264	09/03/18	08/27/18	MEOH, Lot n/a	4 mL	VMRFASP_00049	4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00049	10/31/18	07/18/18	MEOH, Lot 0000196626	100 mL	VM569721S_00003	0.8 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00006	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00019	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00002	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00006	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00019	10/31/18		Restek, Lot A0137486		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00002	12/31/18		Restek, Lot A0123775		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							Total BTEX	12500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00297	05/01/19	04/24/19	MEOH, Lot n/a	5 mL	VMRFASP_00055	5 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00055	06/30/19	03/31/19	MEOH, Lot 0000196628	100 mL	VM569721S_00005	0.8 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00007	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00022	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00004	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00005	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00007	01/31/20		Restek, Lot A0123884		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00022	06/30/19		Restek, Lot A0144188		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00004	06/30/19		Restek, Lot A0123775		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							Total BTEX	12500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00358	07/20/20	07/13/20	MEOH, Lot n/a	5 mL	VMRFASP_00067	5 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00067	09/18/20	06/18/20	MEOH, Lot 0000230446	100 mL	VM569721S_00005	0.8 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00008	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00029	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00006	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00005	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00008	11/30/21		Restek, Lot A0143264		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00029	09/30/21		Restek, Lot A0158728		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00006	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							Total BTEX	12500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00362	08/20/20	08/13/20	MEOH, Lot n/a	5 mL	VMRFASP_00068	5 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00068	11/05/20	08/05/20	MEOH, Lot 0000230446	100 mL	VM569721S_00005	0.8 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00008	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00029	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00006	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00005	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723S_00008	11/30/21		Restek, Lot A0143264		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569724S_00029	09/30/21		Restek, Lot A0158728		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00006	06/30/21		Restek, Lot A0144202		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
vmra9w_00259	07/30/18	07/23/18	MEOH, Lot NA	4 mL	VMRA9_00024	4 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
							Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
.VMRA9_00024	12/17/18	06/17/18	MEOH, Lot 173605TF	50 mL	Freon 151_00003	1 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
					VM569727_00002	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00003	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00003	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00004	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00005	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VM571993_00001	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
..Freon 151_00003	12/17/18	06/17/18	MEOH, Lot 173605TF	20 mL	Freon 151_00001	0.5 mL	1-Chloro-1-fluoroethane TIC	2500 ug/mL
...Freon 151_00001	06/18/19	SynQuest Laboratories , Inc, Lot 270800			(Purchased Reagent)		1-Chloro-1-fluoroethane TIC	10 %
..VM569727_00002	03/31/19	RESTEK, Lot A0118487			(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00003	04/30/22	Restek, Lot A0126447			(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00003	02/28/22	Restek, Lot A0125050			(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00004	05/31/19	Restek, Lot A0132816			(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00005	04/30/19	Restek, Lot A0131668			(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..VM571993_00001	12/31/18	restek, Lot A0123796			(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
vmra9w_00295	04/30/19	04/25/19	MEOH, Lot NA	5 mL	VMRA9_00026	5 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
							Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-amyl-methyl ether (TAME)	50 ug/mL
.VMRA9_00026	04/30/19	03/31/19	MEOH, Lot 0000196628	50 mL	Freon 151_00004	1 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
					VM569727_00003	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00003	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00003	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00004	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00005	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
					VM571993_00003	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
..Freon 151_00004	06/17/19	12/17/18	MEOH, Lot 173605TF	20 mL	Freon 151_00001	0.5 mL	1-Chloro-1-fluoroethane TIC	2500 ug/mL
...Freon 151_00001	06/18/19	SynQuest Laboratories , Inc, Lot 270800			(Purchased Reagent)		1-Chloro-1-fluoroethane TIC	10 %
..VM569727_00003	02/29/20	RESTEK, Lot A0124672			(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00003	04/30/22	Restek, Lot A0126447			(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00003	02/28/22	Restek, Lot A0125050			(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00004	05/31/19	Restek, Lot A0132816			(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00005	04/30/19	Restek, Lot A0131668			(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..VM571993_00003	07/31/20	restek, Lot A0139911			(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
VMRA9W_00356	08/15/20	08/08/20	MEOH, Lot NA	5 mL	VMRA9_00032	5 mL	Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trimethylbenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
.VMRA9_00032	01/31/21	07/31/20	MEOH, Lot 0000230446	50 mL	VM569727_00004	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00005	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00005	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00006	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00007	1 mL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					VM571993_00004	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
..VM569727_00004	01/31/22		RESTEK, Lot A0145193		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00005	08/31/23		Restek, Lot A0140938		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00005	04/30/22		Restek, Lot A0126478		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00006	05/31/21		Restek, Lot A0154734		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00007	06/30/21		Restek, Lot A0156071		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
..VM571993_00004	03/31/22		restek, Lot A0158947		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
VMRA9W_00357	08/24/20	08/17/20	MEOH, Lot NA	5 mL	VMRA9_00032	5 mL	Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL

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SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
.VMRA9_00032	01/31/21	07/31/20	MEOH, Lot 0000230446	50 mL	VM569727_00004	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00005	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00005	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00006	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00007	1 mL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
					VM571993_00004	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl-t-butyl ether (ETBE)	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl-methyl ether (TAME)	50 ug/mL
..VM569727_00004	01/31/22		RESTEK, Lot A0145193		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00005	08/31/23		Restek, Lot A0140938		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00005	04/30/22		Restek, Lot A0126478		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00006	05/31/21		Restek, Lot A0154734		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00007	06/30/21		Restek, Lot A0156071		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..VM571993_00004	03/31/22		restek, Lot A0158947		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl-t-butyl ether (ETBE)	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl-methyl ether (TAME)	2500 ug/mL
vmrgas_00255	07/30/18	07/23/18	MEOH, Lot 0000196626	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL

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SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
vmrgas_00259	08/31/18	08/24/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
vmrgas_00291	05/07/19	04/30/19	MEOH, Lot 0000198123	10 mL	vm569722_00012	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00012	11/30/21		Restek, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00347	07/22/20	07/15/20	MEOH, Lot 0000230446	10 mL	vm569722_00015	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00015	11/30/22		Restek, Lot A0154679		(Purchased Reagent)		Bromomethane	2500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00350	08/15/20	08/08/20	MEOH, Lot 0000230446	10 mL	vm569722_00017	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00017	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00351	08/24/20	08/17/20	MEOH, Lot 0000230446	10 mL	vm569722_00017	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00017	03/31/23		Restek, Lot A0159085		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
vmrprimw_00292	07/26/18	07/19/18	MEOH, Lot NA	4 mL	VMRPRIM_00028	4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL

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SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL

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SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00028	07/29/18	04/29/18	MEOH, Lot 0000177891	50 mL	VM569721_00002	0.4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00003	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00014	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL

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SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00002	08/31/18		Restek, Lot A0113194		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569723_00003	07/31/18		restek, Lot A0112895		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00014	07/31/18		Restek, Lot A0134268		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL

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SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
vmrprimw_00297	08/29/18	08/22/18	MEOH, Lot NA	4 mL	VMRPRIM_00029	4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00029	10/31/18	07/28/18	MEOH, Lot 0000196626	50 mL	VM569721_00004	0.4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00004	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00016	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00004	11/30/18		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00004	11/30/18		restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00016	10/31/18		Restek, Lot A0137562		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00297	08/29/18	08/22/18	MEOH, Lot NA	4 mL	VMRPRIM_00029	4 mL	Total BTEX	250 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00029	10/31/18	07/28/18	MEOH, Lot 0000196626	50 mL	VM571992_00001	1 mL	Total BTEX	250 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM571992_00001	12/31/18	Restek, Lot A0123711			(Purchased Reagent)		Total BTEX	12500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
vmrprimw_00331	05/01/19	04/24/19	MEOH, Lot NA	4 mL	VMRPRIM_00035	4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00035	06/30/19	03/01/19	MEOH, Lot 0000196628	50 mL	VM569721_00005	0.4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00007	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00018	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00002	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00005	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00007	12/31/20		restek, Lot A0133302		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00018	07/31/19		Restek, Lot A0144661		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
vmrprimw_00394	07/23/20	07/16/20	MEOH, Lot NA	5 mL	VMRPRIM_00045	5 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00045	08/01/20	05/01/20	MEOH, Lot 0000230446	50 mL	VM569721_00006	0.4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00003	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00006	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00003	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00394	07/23/20	07/16/20	MEOH, Lot NA	5 mL	VMRPRIM_00045	5 mL	Total BTEX	250 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00045	08/01/20	05/01/20	MEOH, Lot 0000230446	50 mL	VM571992_00003	1 mL	Total BTEX	250 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM571992_00003	06/30/21	Restek, Lot A0143774			(Purchased Reagent)		Total BTEX	12500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
VMRPRIMW_00399	08/19/20	08/12/20	MEOH, Lot NA	5 mL	VMRPRIM_00046	5 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMRPRIM_00046	09/30/20	06/30/20	MEOH, Lot 0000230446	50 mL	VM569721_00006	0.4 mL	2-Butanone	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00008	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00024	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00003	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							p-Isopropyltoluene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721_00006	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00008	02/28/22		restek, Lot A0146250		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00024	07/31/21		Restek, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00003	06/30/21		Restek, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichlorotrifluoroethane (Freon 113)	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Isopropyltoluene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							Total BTEX	12500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL

Reagent

vm30026_00002

Rec: 4/11/17 (5)

VM30026-00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0120567

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,019.3 µg/mL	+/- 11.8506	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 113.2335	µg/mL	Unstressed
	Purity 99%		+/- 115.8825	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm30026_00003

Rec: 11/28/18
VM30026-00063

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Catalog No. : 30026 **Lot No.:** A0141187

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,004.7 µg/mL	+/- 11.7645	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 112.4110	µg/mL	Unstressed
	Purity 99%		+/- 115.0408	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm30241_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0134242

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Fluorobenzene		2,503.6 µg/mL	+/- 14.5561 µg/mL		Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 140.3744 µg/mL		Unstressed
	Purity 99%			+/- 143.6590 µg/mL		Stressed
2	Chlorobenzene-d5		2,506.4 µg/mL	+/- 14.5724 µg/mL		Gravimetric
	CAS # 3114-55-4	(Lot PR-22736)		+/- 140.5314 µg/mL		Unstressed
	Purity 99%			+/- 143.8196 µg/mL		Stressed
3	1,4-Dichlorobenzene-d4		2,513.4 µg/mL	+/- 14.6131 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 140.9238 µg/mL		Unstressed
	Purity 99%			+/- 144.2213 µg/mL		Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VM30241-00007

REC'D 5-4-18

Reagent

VM567650_00027

VM567650-00027 Rec: 4/10/17 (39)

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0120212

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,521.3 µg/mL	+/- 14.6591 µg/mL		Gravimetric
	CAS # 1868-53-7	(Lot 032015)		+/- 141.3668 µg/mL		Unstressed
	Purity 99%			+/- 144.6746 µg/mL		Stressed
2	1,2-Dichloroethane-d4		2,523.7 µg/mL	+/- 14.6730 µg/mL		Gravimetric
	CAS # 17060-07-0	(Lot 14C-191)		+/- 141.5014 µg/mL		Unstressed
	Purity 99%			+/- 144.8123 µg/mL		Stressed
3	Toluene-d8		2,523.6 µg/mL	+/- 14.6724 µg/mL		Gravimetric
	CAS # 2037-26-5	(Lot PR-26623)		+/- 141.4957 µg/mL		Unstressed
	Purity 99%			+/- 144.8066 µg/mL		Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,510.9 µg/mL	+/- 14.5986 µg/mL		Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 140.7837 µg/mL		Unstressed
	Purity 99%			+/- 144.0778 µg/mL		Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00029

Rec: 8/22/17

VM567650-00029

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Catalog No. : 567650 **Lot No.:** A0124069

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,521.2 µg/mL	+/- 14.6582 µg/mL +/- 141.3584 µg/mL +/- 144.6660 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,513.8 µg/mL	+/- 14.6157 µg/mL +/- 140.9489 µg/mL +/- 144.2469 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,519.4 µg/mL	+/- 14.6480 µg/mL +/- 141.2603 µg/mL +/- 144.5656 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,520.8 µg/mL	+/- 14.6559 µg/mL +/- 141.3360 µg/mL +/- 144.6430 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00030

Rec: 11/8/17
VM567650-00050

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0124069

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane	2,521.2 µg/mL	+/- 14.6582	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012016)		+/- 141.3584	µg/mL	Unstressed
	Purity 99%		+/- 144.6660	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,513.8 µg/mL	+/- 14.6157	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-25433)		+/- 140.9489	µg/mL	Unstressed
	Purity 98%		+/- 144.2469	µg/mL	Stressed
3	Toluene-d8	2,519.4 µg/mL	+/- 14.6480	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-27311)		+/- 141.2603	µg/mL	Unstressed
	Purity 99%		+/- 144.5656	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,520.8 µg/mL	+/- 14.6559	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 141.3360	µg/mL	Unstressed
	Purity 99%		+/- 144.6430	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568720_00028

rec: 6/1/18

VM568720-00028

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0135693

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,777.5 µg/mL	+/- 115.8016	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 171116JLM)		+/- 634.1288	µg/mL	Unstressed
	Purity 99%		+/- 737.1054	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00032

Rec: 3/13/19

VM568720_00032

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Catalog No. : 568720 **Lot No.:** A0143013

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein		19,750.0	µg/mL	+/- 115.6406	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 180823JACG)			+/- 633.2471	µg/mL	Unstressed
	Purity 99%				+/- 736.0805	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00037

Rec: 1/16/20 VM568720_00037

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0154578

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein			19,810.7	µg/mL	+/-	115.9958	µg/mL	Gravimetric
	CAS #	107-02-8	(Lot D0012019410)			+/-	395.7642	µg/mL	Unstressed
	Purity	99%				+/-	887.8866	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00039

Rec: 4/7/20
VM568720_00039

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Catalog No. : 568720 **Lot No.:** A0156861

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein		19,752.0	µg/mL	+/- 115.6523	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot D0012019-1219)			+/- 394.5922	µg/mL	Unstressed
	Purity 99%				+/- 885.2572	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720S_00026

Rec'd 6/1/18

VM5687205-00026

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Catalog No. : 568720.SEC **Lot No.:** A0135949

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,772.0 µg/mL	+/- 116.0332	µg/mL	Gravimetric
	CAS # 107-02-8.SEC (Lot X19C007)		+/- 634.0007	µg/mL	Unstressed
	Purity 99%		+/- 736.9419	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720S_00030

Acc: 2/15/19 (9)
VM5687205-00030

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720.SEC **Lot No.:** A0143084

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,750.0 µg/mL	+/- 115.6406	µg/mL	Gravimetric
	CAS # 107-02-8.SEC (Lot X19C007)		+/- 633.2471	µg/mL	Unstressed
	Purity 99%		+/- 736.0805	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720S_00036

Rec: 1/16/20 VM 568720.SEC — 000396

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720.SEC **Lot No.:** A0154553

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein	19,750.0 µg/mL	+/- 115.6405	µg/mL	Gravimetric
	CAS # 107-02-8.SEC (Lot D8402600-1024)		+/- 394.5517	µg/mL	Unstressed
	Purity 97%		+/- 885.1665	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00002

VM569721_00002 Rec: 9/16/15

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Catalog No. : 569721 **Lot No.:** A0113194

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone **CAS #** 67-64-1 **Purity** 99%	(Lot 07196AK)	12,510.0 µg/mL	+/- 73.2488 µg/mL +/- 665.8110 µg/mL +/- 666.5452 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 99%	(Lot BCBK4358V)	12,527.5 µg/mL	+/- 73.3513 µg/mL +/- 666.7424 µg/mL +/- 667.4776 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBF5332V)	12,503.0 µg/mL	+/- 73.2078 µg/mL +/- 665.4385 µg/mL +/- 666.1722 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKBN7380V)	12,509.0 µg/mL	+/- 73.2429 µg/mL +/- 665.7578 µg/mL +/- 666.4919 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721_00004

Rec: 1-25-17

VM569721_00004

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,501.8 µg/mL	+/- 72.6865	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot 07196AK)		+/- 754.2890	µg/mL	Unstressed
	Purity 99%			+/- 756.0798	µg/mL	Stressed
2	2-Butanone (MEK)		12,499.7 µg/mL	+/- 72.6744	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBG0444V)		+/- 754.1625	µg/mL	Unstressed
	Purity 98%			+/- 755.9530	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,500.6 µg/mL	+/- 72.6796	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBF9556V)		+/- 754.2166	µg/mL	Unstressed
	Purity 99%			+/- 756.0072	µg/mL	Stressed
4	2-Hexanone		12,502.4 µg/mL	+/- 72.6900	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKBT3158V)		+/- 754.3252	µg/mL	Unstressed
	Purity 99%			+/- 756.1161	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721_00005

VM569721_00005 Rec: 11/30/18

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0137509

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,619.0 µg/mL	+/- 73.8870	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBH6933)		+/- 761.4104	µg/mL	Unstressed
	Purity 99%			+/- 763.2179	µg/mL	Stressed
2	2-Butanone (MEK)		12,602.0 µg/mL	+/- 73.7875	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 760.3846	µg/mL	Unstressed
	Purity 99%			+/- 762.1897	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,531.0 µg/mL	+/- 73.3718	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBH7006)		+/- 756.1006	µg/mL	Unstressed
	Purity 99%			+/- 757.8955	µg/mL	Stressed
4	2-Hexanone		12,606.0 µg/mL	+/- 73.8109	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKBW0198V)		+/- 760.6260	µg/mL	Unstressed
	Purity 99%			+/- 762.4316	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721_00006

RCL: 12/4/18

VM569721_00006

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0137509

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot SHBH6933) **Purity** 99%	12,619.0 µg/mL	+/- 73.8870 µg/mL +/- 761.4104 µg/mL +/- 763.2179 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBF2461V) **Purity** 99%	12,602.0 µg/mL	+/- 73.7875 µg/mL +/- 760.3846 µg/mL +/- 762.1897 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBH7006) **Purity** 99%	12,531.0 µg/mL	+/- 73.3718 µg/mL +/- 756.1006 µg/mL +/- 757.8955 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBW0198V) **Purity** 99%	12,606.0 µg/mL	+/- 73.8109 µg/mL +/- 760.6260 µg/mL +/- 762.4316 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00003

Rec: 7/12/16 (20)
VM569721S-00003

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.sec **Lot No.:** A0118013

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot P14A572) **Purity** 99%	12,550.0 µg/mL	+/- 73.4830 µg/mL +/- 757.2470 µg/mL +/- 759.0446 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,603.0 µg/mL	+/- 73.7933 µg/mL +/- 760.4450 µg/mL +/- 762.2502 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,591.5 µg/mL	+/- 73.7260 µg/mL +/- 759.7511 µg/mL +/- 761.5546 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,588.0 µg/mL	+/- 73.7055 µg/mL +/- 759.5399 µg/mL +/- 761.3429 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00005

Rec: 6/15/18 20 vials

VM569721S-00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0133078

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,504.8 µg/mL	+/- 73.2184 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot P14A572)		+/- 754.5197 µg/mL	Unstressed
	Purity 99%		+/- 756.3109 µg/mL	Stressed
2	2-Butanone (MEK)	12,504.0 µg/mL	+/- 73.2137 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RA58J)		+/- 754.4715 µg/mL	Unstressed
	Purity 99%		+/- 756.2625 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,500.8 µg/mL	+/- 73.1949 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 754.2784 µg/mL	Unstressed
	Purity 99%		+/- 756.0689 µg/mL	Stressed
4	2-Hexanone	12,503.6 µg/mL	+/- 73.2113 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 754.4473 µg/mL	Unstressed
	Purity 99%		+/- 756.2383 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00011

Rec: 4/17/18

VM569722_00011

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Catalog No. : 569722 **Lot No.:** A0131502

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,501.3 µg/mL	+/- 20.2137 µg/mL +/- 140.9452 µg/mL +/- 144.2108 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG9707V) **Purity** 99%	2,504.9 µg/mL	+/- 24.8531 µg/mL +/- 141.8827 µg/mL +/- 145.1364 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.3 µg/mL	+/- 21.7258 µg/mL +/- 141.0069 µg/mL +/- 144.2635 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBH7966) **Purity** 99%	2,499.9 µg/mL	+/- 19.8572 µg/mL +/- 140.8167 µg/mL +/- 144.0816 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.4 µg/mL	+/- 24.9675 µg/mL +/- 141.6590 µg/mL +/- 144.9064 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.1 µg/mL	+/- 25.2649 µg/mL +/- 141.6931 µg/mL +/- 144.9388 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 16.7114 µg/mL +/- 140.4149 µg/mL +/- 143.6892 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	(Lot SHBH4155V)	2,499.5 µg/mL	+/- 20.7085 +/- 140.9189 +/- 144.1805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

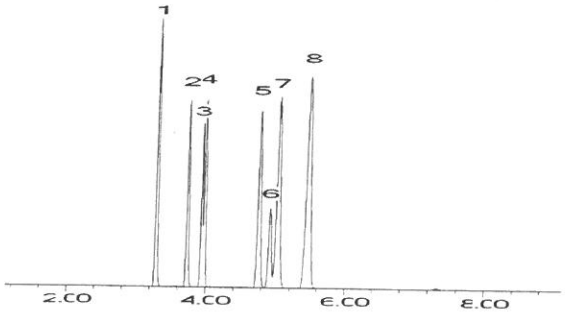
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 10-Oct-2017 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 12-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

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Acc: 1/23/19

VM569722_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0143158

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.9 µg/mL	+/- 17.2023 µg/mL +/- 140.5234 µg/mL +/- 143.7976 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBJ6334) **Purity** 99%	2,500.4 µg/mL	+/- 17.0791 µg/mL +/- 140.4796 µg/mL +/- 143.7534 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00012557) **Purity** 99%	2,500.4 µg/mL	+/- 16.5693 µg/mL +/- 140.4224 µg/mL +/- 143.6977 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.1 µg/mL	+/- 17.0785 µg/mL +/- 140.4623 µg/mL +/- 143.7357 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.9 µg/mL	+/- 16.5511 µg/mL +/- 140.4457 µg/mL +/- 143.7217 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,502.0 µg/mL	+/- 16.0409 µg/mL +/- 140.4480 µg/mL +/- 143.7268 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 7766400) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.8	µg/mL	+/-	17.8012	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBH4155V)			+/-	140.5946	µg/mL	Unstressed
	Purity 99%				+/-	143.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

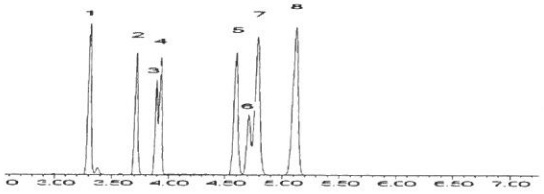
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician **Date Mixed:** 12-Nov-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 11-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Rec: 4/14/20
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0154679

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.7 µg/mL	+/- 18.2705 µg/mL +/- 140.7566 µg/mL +/- 144.0300 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 18.7547 µg/mL +/- 140.6865 µg/mL +/- 143.9553 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.1 µg/mL	+/- 18.5858 µg/mL +/- 140.7083 µg/mL +/- 143.9787 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,497.1 µg/mL	+/- 17.5808 µg/mL +/- 140.3628 µg/mL +/- 143.6309 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 23.3138 µg/mL +/- 141.3956 µg/mL +/- 144.6498 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,499.0 µg/mL	+/- 21.4252 µg/mL +/- 140.9973 µg/mL +/- 144.2558 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,499.6	µg/mL	+/-	21.2368	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot 25931)			+/-	141.0019	µg/mL	Unstressed
	Purity 99%				+/-	144.2618	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

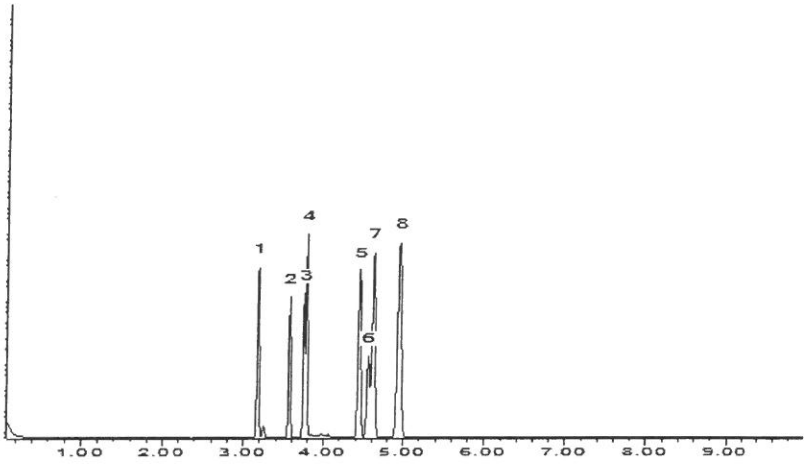
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 **Balance:** B707717271

Feng-Yun Lo - QC Analyst

Date Passed: 10-Nov-2019

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722_00017

Rec! 6/29/20
VM569722-00017

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.3 µg/mL	+/- 16.4178 +/- 140.5076 +/- 143.7858	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 +/- 140.4038 +/- 143.6799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 +/- 140.4890 +/- 143.7623	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 +/- 140.5681 +/- 143.8406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 +/- 140.4450 +/- 143.7217	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,500.3 µg/mL	+/- 17.7279 +/- 140.5555 +/- 143.8274	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

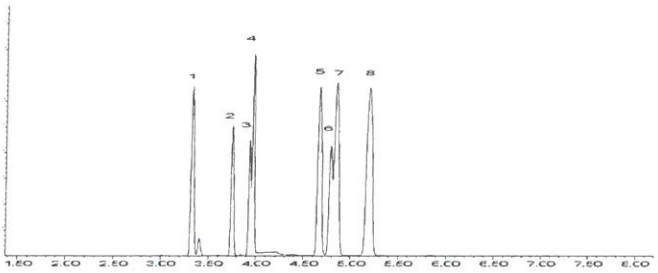
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

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vm569722S_00004

VM569722S-00004 Rec'd 7/12/16 (20)

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.sec **Lot No.:** A0115484

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 22274) **Purity** 99%	2,505.6 µg/mL	+/- 16.6251 µg/mL +/- 140.7169 µg/mL +/- 143.9990 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,517.3 µg/mL	+/- 17.3796 µg/mL +/- 141.4522 µg/mL +/- 144.7477 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,510.2 µg/mL	+/- 16.6342 µg/mL +/- 140.9727 µg/mL +/- 144.2609 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,516.5 µg/mL	+/- 17.4874 µg/mL +/- 141.4240 µg/mL +/- 144.7182 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,511.5 µg/mL	+/- 16.8310 µg/mL +/- 141.0664 µg/mL +/- 144.3557 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,504.8 µg/mL	+/- 16.4341 µg/mL +/- 140.6469 µg/mL +/- 143.9283 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,500.5 µg/mL	+/- 16.1659 µg/mL +/- 140.3776 µg/mL +/- 143.6540 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,524.5	µg/mL	+/- 16.8928	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/- 141.7952	µg/mL	Unstressed
	Purity 99%				+/- 145.1017	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

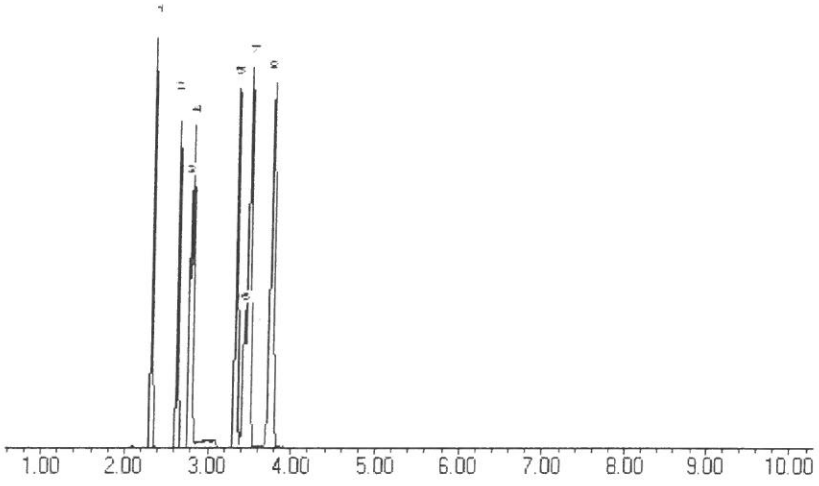
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 10-Dec-2015

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Certificate #FM 80397

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VM569722S-0005 Rec: 7/17/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0124116

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 23586) **Purity** 99%	2,503.4 µg/mL	+/- 19.5506 µg/mL +/- 140.9699 µg/mL +/- 144.2404 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,508.1 µg/mL	+/- 21.1963 µg/mL +/- 141.4639 µg/mL +/- 144.7353 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.6 µg/mL	+/- 19.4186 µg/mL +/- 141.7924 µg/mL +/- 145.0836 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,504.0 µg/mL	+/- 20.5722 µg/mL +/- 141.1450 µg/mL +/- 144.4130 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,498.5 µg/mL	+/- 19.9806 µg/mL +/- 140.7602 µg/mL +/- 144.0229 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,494.9 µg/mL	+/- 17.8868 µg/mL +/- 140.2786 µg/mL +/- 143.5429 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,503.4 µg/mL	+/- 20.0421 µg/mL +/- 141.0350 µg/mL +/- 144.3039 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,503.2	µg/mL	+/-	18.7037	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)			+/-	140.8450	µg/mL	Unstressed
	Purity 99%				+/-	144.1179	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

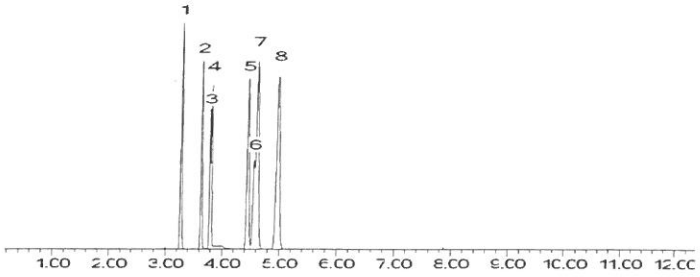
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 12-Jan-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 17-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

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VM569722S-00007

Rec: 1-23-19

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0142117

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,503.0 µg/mL	+/- 23.3708 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24847)		+/- 141.5277 µg/mL	Unstressed
	Purity 99%		+/- 144.7846 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,497.4 µg/mL	+/- 25.3963 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.5662 µg/mL	Unstressed
	Purity 99%		+/- 144.8078 µg/mL	Stressed
3	Vinyl chloride	2,501.8 µg/mL	+/- 19.5755 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 140.8855 µg/mL	Unstressed
	Purity 99%		+/- 144.1539 µg/mL	Stressed
4	1,3-Butadiene	2,505.3 µg/mL	+/- 20.9927 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 22331)		+/- 141.2797 µg/mL	Unstressed
	Purity 99%		+/- 144.5480 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,498.6 µg/mL	+/- 25.6449 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 141.6796 µg/mL	Unstressed
	Purity 99%		+/- 144.9218 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,498.9 µg/mL	+/- 24.9623 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 141.5741 µg/mL	Unstressed
	Purity 99%		+/- 144.8194 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.6714 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7766400)		+/- 140.1867 µg/mL	Unstressed
	Purity 99%		+/- 143.4662 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.7 µg/mL	+/-	23.1926	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	141.4285	µg/mL	Unstressed
	Purity 99%			+/-	144.6844	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

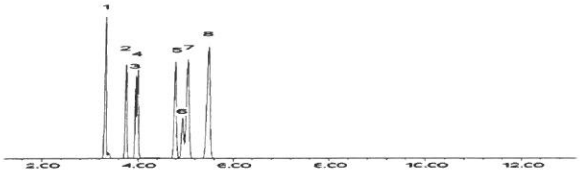
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 04-Oct-2018 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Oct-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00003

VM 569723-00003 Rec'd 11/12/15

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0112895

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,503.2 µg/mL	+/- 14.6902	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.1239	µg/mL	Unstressed
	Purity 99%		+/- 53.3593	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723_00004

VM569723-00004 Rec: 5/16/16 (20)

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0115628

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether (Lot MKBK2735V) **CAS #** 110-75-8 **Purity** 99%	2,509.2 µg/mL	+/- 14.5887 µg/mL +/- 53.7223 µg/mL +/- 55.2841 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723_00007

Rec: 12/4/18

vm569723_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0133302

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,511.5 µg/mL	+/- 14.7391	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.8098	µg/mL	Unstressed
	Purity 98%		+/- 55.3720	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723_00008

Rec: 9/9/19
VM569723-00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0146250

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.5253	µg/mL	Unstressed
	Purity 99%		+/- 55.0814	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723S_00006

VM569723s-00006 RCC: 9/9/20 (20)

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723.sec **Lot No.:** A0115500

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,501.5 µg/mL	+/- 14.5439	µg/mL	Gravimetric
	CAS # 110-75-8.SEC (Lot BQZ2K-QD)		+/- 53.5574	µg/mL	Unstressed
	Purity 99%		+/- 55.1144	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723S_00007

Rec! 5/24/17 (20)

VM569723 - 00007

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Catalog No. : 569723.SEC **Lot No.:** A0123884

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,504.4 µg/mL	+/- 14.6972 µg/mL	Gravimetric
	CAS # 110-75-8.SEC (Lot BQZ2K-QD)		+/- 53.6567 µg/mL	Unstressed
	Purity 99%		+/- 55.2145 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723S_00008

Rec: 9/9/19
VM569723s-00008

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Catalog No. : 569723.SEC **Lot No.:** A0143264

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,502.8 µg/mL	+/- 14.6878	µg/mL	Gravimetric
	CAS # 110-75-8.SEC (Lot BQZ2K-QD)		+/- 53.6224	µg/mL	Unstressed
	Purity 99%		+/- 55.1792	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00014

Rec'd 4/17/18 VM569724_00014

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Catalog No. : 569724 **Lot No.:** A0134268

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,014.0 µg/mL	+/- 29.3581	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.5368	µg/mL	Unstressed
	Purity 99%		+/- 303.2550	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00016

VM569724_ 05016 Rcd: 7/13/18

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Catalog No. : 569724 **Lot No.:** A0137562

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,020.0 µg/mL	+/- 29.4602	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.9053	µg/mL	Unstressed
	Purity 99%		+/- 303.6243	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00018

Rec: 2/15/19

VM569724_00018

(10)

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Catalog No. : 569724 **Lot No.:** A0144661

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate	5,050.0 µg/mL	+/- 29.6362 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 304.7155 µg/mL	Unstressed
	Purity 99%		+/- 305.4388 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00024

Rcd 4-20-20 VM569724_00024

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Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate		5,040.0 µg/mL	+/- 29.5103	µg/mL	Gravimetric
	CAS # 108-05-4	(Lot 192709KJ)		+/- 304.1056	µg/mL	Unstressed
	Purity 99%			+/- 304.8275	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724S_00019

Rcvd: 7/13/18

VM5697245_00019

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Catalog No. : 569724.SEC **Lot No.:** A0137486

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,035.0 µg/mL	+/- 29.5482	µg/mL	Gravimetric
	CAS # 108-05-4.SEC (Lot F3Z5C)		+/- 303.8104	µg/mL	Unstressed
	Purity 99%		+/- 304.5316	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724S_00022

Rec: 3/13/19
VMS69724S-00022

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Catalog No. : 569724.SEC **Lot No.:** A0144188

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,031.0 µg/mL	+/- 29.5247	µg/mL	Gravimetric
	CAS # 108-05-4.SEC (Lot F3Z5C)		+/- 303.5691	µg/mL	Unstressed
	Purity 99%		+/- 304.2897	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724S_00029

Rec'd: 4/20/19 VM5697245_00029

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Catalog No. : 569724.SEC **Lot No.:** A0158728

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,034.0 µg/mL	+/- 29.5423	µg/mL	Gravimetric
	CAS # 108-05-4.SEC (Lot 190320CGKJ)		+/- 303.7501	µg/mL	Unstressed
	Purity 99%		+/- 304.4711	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
08 April 2020
Expiration date extended from September 30, 2020 to September 30, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569727_00002

VM569727_00002 Rec: 11/29/16 (10)

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Catalog No. : 569727 **Lot No.:** A0118487

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Cyclohexanone	25,000.4 µg/mL	+/- 146.3826 µg/mL	Gravimetric
	CAS # 108-94-1 (Lot MKBN5282V)		+/- 1,508.4819 µg/mL	Unstressed
	Purity 99%		+/- 1,512.0629 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569727_00003

VMS69727_0003 Rec'd 1/11/18

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Catalog No. : 569727 **Lot No.:** A0124672

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000 µg/ml, Water, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2020 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Cyclohexanone		25,006.0	µg/mL	+/- 146.4156	µg/mL	Gravimetric
	CAS # 108-94-1	(Lot MKBN5282V)			+/- 1,508.8223	µg/mL	Unstressed
	Purity 99%				+/- 1,512.4040	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569727_00004

Rec: 9/9/19
VM569727_00004
(10)

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Catalog No. : 569727 **Lot No.:** A0145193

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Cyclohexanone	25,008.5 µg/mL	+/- 146.4305 µg/mL	Gravimetric
	CAS # 108-94-1 (Lot MKCD4357)		+/- 1,508.9751 µg/mL	Unstressed
	Purity 99%		+/- 1,512.5572 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569727S_00002

VM569727S-00002 Exp: 1/31/18

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Catalog No. : 569727.SEC **Lot No.:** A0131573

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Cyclohexanone	24,978.0 µg/mL	+/- 146.2517 µg/mL	Gravimetric
	CAS # 108-94-1.SEC (Lot ZEHPG)		+/- 1,507.1328 µg/mL	Unstressed
	Purity 99%		+/- 1,510.7105 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

vm570806_00003

VM570806-00003 Rec: 12/1/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570806 **Lot No.:** A0126447

Description : 8260 List 2 / Std #4 Pentachloroethane

8260 List 2 / Std #4 Pentachloroethane 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	2,519.0 µg/mL	+/- 14.7829 µg/mL	Gravimetric
	CAS # 76-01-7 (Lot 160830B-BL2)		+/- 141.2521 µg/mL	Unstressed
	Purity 99%		+/- 144.5566 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm570806_00005

Rec: 6/19/19
VMS70806_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570806 **Lot No.:** A0140938

Description : 8260 List 2 / Std #4 Pentachloroethane

8260 List 2 / Std #4 Pentachloroethane 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachloroethane	2,501.0 µg/mL	+/- 14.6773	µg/mL	Gravimetric
	CAS # 76-01-7 (Lot L7GVM)		+/- 140.2428	µg/mL	Unstressed
	Purity 99%		+/- 143.5236	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm570806S_00003

Rec: 12/1/17
VM5708065-00003

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Catalog No. : 570806.sec **Lot No.:** A0126373

Description : 8260 List 2 / Std #4 Pentachloroethane

8260 List 2 / Std #4 Pentachloroethane 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachloroethane	2,513.5 µg/mL	+/- 14.7506 µg/mL	Gravimetric
	CAS # 76-01-7.SEC (Lot 5854000)		+/- 140.9437 µg/mL	Unstressed
	Purity 99%		+/- 144.2410 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm570807_00003

VM570807_00003
Rec: 12/1/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570807 **Lot No.:** A0125050

Description : 8260 List 2 / Std #5 Methylnaphthalenes

8260 List 2 / Std #5 Methylnaphthalenes 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylnaphthalene		2,511.8 µg/mL	+/- 14.7406	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBF0201V)		+/- 140.8484	µg/mL	Unstressed
	Purity 95%			+/- 144.1434	µg/mL	Stressed
2	1-Methylnaphthalene		2,514.2 µg/mL	+/- 14.7547	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 523400-9)		+/- 140.9824	µg/mL	Unstressed
	Purity 98%			+/- 144.2806	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm570807_00005

Rev: 4/29/14

VM570807_00005

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570807 **Lot No.:** A0126478

Description : 8260 List 2 / Std #5 Methylnaphthalenes

8260 List 2 / Std #5 Methylnaphthalenes 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBF0201V) **Purity** 95%	2,501.4 µg/mL	+/- 14.6793 µg/mL +/- 140.2624 µg/mL +/- 143.5437 µg/mL	Gravimetric Unstressed Stressed
2	1-Methylnaphthalene **CAS #** 90-12-0 (Lot 523400-9) **Purity** 98%	2,505.9 µg/mL	+/- 14.7058 µg/mL +/- 140.5153 µg/mL +/- 143.8025 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm570807S_00003

VM570807S-00003 Rcc 12/1/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570807.sec **Lot No.:** A0126553

Description : 8260 List 2 / Std #5 Methylnaphthalenes

8260 List 2 / Std #5 Methylnaphthalenes 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Methylnaphthalene **CAS #** 91-57-6.SEC (Lot 76023-1) **Purity** 98%	2,451.0 µg/mL	+/- 14.3837 µg/mL +/- 137.4379 µg/mL +/- 140.6532 µg/mL	Gravimetric Unstressed Stressed
2	1-Methylnaphthalene **CAS #** 90-12-0.SEC (Lot UATSA) **Purity** 97%	2,507.5 µg/mL	+/- 14.7151 µg/mL +/- 140.6045 µg/mL +/- 143.8938 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM570808_00004

VM570808_00004 Rec: 1/11/18

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808 **Lot No.:** A0132816

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2,500-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0 (Lot SHBG8138V) **Purity** 99%	25,038.4 µg/mL	+/- 146.6053 µg/mL +/- 1,238.7172 µg/mL +/- 1,269.5131 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 (Lot 170628JLM) **Purity** 99%	2,522.0 µg/mL	+/- 14.8005 µg/mL +/- 124.7741 µg/mL +/- 127.8760 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 (Lot 1012014) **Purity** 99%	25,034.4 µg/mL	+/- 146.5819 µg/mL +/- 1,238.5193 µg/mL +/- 1,269.3102 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (isooctane) **CAS #** 540-84-1 (Lot SHBF8066V) **Purity** 99%	2,512.8 µg/mL	+/- 14.7465 µg/mL +/- 124.3190 µg/mL +/- 127.4095 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3 (Lot SHBH5137V) **Purity** 98%	62,503.6 µg/mL	+/- 365.9535 µg/mL +/- 3,092.2204 µg/mL +/- 3,169.0963 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9 (Lot BCBL0537V) **Purity** 98%	5,015.6 µg/mL	+/- 29.3677 µg/mL +/- 248.1373 µg/mL +/- 254.3062 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5 (Lot 05107LK) **Purity** 98%	2,502.5 µg/mL	+/- 14.6862 µg/mL +/- 123.8108 µg/mL +/- 126.8886 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene **CAS #** 526-73-8 **Purity** 97%	(Lot 877605-14)	2,505.7 µg/mL	+/- 14.7049 +/- 123.9679 +/- 127.0497	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride **CAS #** 100-44-7 **Purity** 99%	(Lot SHBB7346V)	2,507.2 µg/mL	+/- 14.7137 +/- 124.0419 +/- 127.1255	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene **CAS #** 108-70-3 **Purity** 99%	(Lot 11319AS)	2,502.4 µg/mL	+/- 14.6855 +/- 123.8044 +/- 126.8822	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

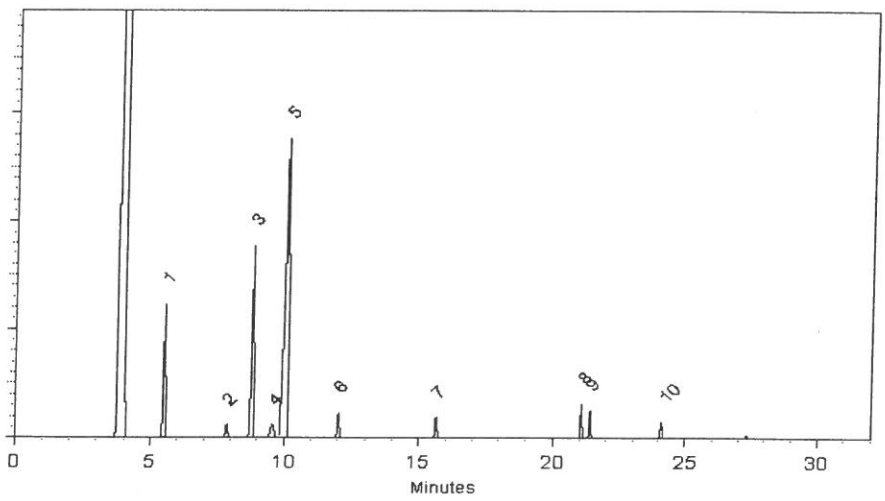
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 29-Nov-2017 **Balance:** B707717271

Amanda Miller - Operations Tech-ARM QC

Date Passed: 01-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808 **Lot No.:** A0154734

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2,500-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0 (Lot SHBH7211) **Purity** 99%	25,135.0 µg/mL	+/- 147.1710 µg/mL +/- 1,243.4963 µg/mL +/- 1,274.4109 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 (Lot 190814JLM) **Purity** 99%	2,523.5 µg/mL	+/- 14.8093 µg/mL +/- 124.8483 µg/mL +/- 127.9520 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 (Lot 1012019) **Purity** 99%	25,164.0 µg/mL	+/- 147.3408 µg/mL +/- 1,244.9310 µg/mL +/- 1,275.8813 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (isooctane) **CAS #** 540-84-1 (Lot SHBD2922V) **Purity** 99%	2,512.0 µg/mL	+/- 14.7418 µg/mL +/- 124.2794 µg/mL +/- 127.3689 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3 (Lot SHBK4786) **Purity** 99%	63,024.5 µg/mL	+/- 369.0033 µg/mL +/- 3,117.9899 µg/mL +/- 3,195.5065 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9 (Lot BCBL0537V) **Purity** 98%	5,009.8 µg/mL	+/- 29.3332 µg/mL +/- 247.8464 µg/mL +/- 254.0081 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5 (Lot BCBS3368V) **Purity** 98%	2,516.6 µg/mL	+/- 14.7691 µg/mL +/- 124.5090 µg/mL +/- 127.6042 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene **CAS #** 526-73-8 **Purity** 98%	(Lot 877605-12)	2,510.3	µg/mL	+/- 14.7317 +/- 124.1938 +/- 127.2812	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride **CAS #** 100-44-7 **Purity** 99%	(Lot SHBH2102V)	2,516.0	µg/mL	+/- 14.7653 +/- 124.4773 +/- 127.5717	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene **CAS #** 108-70-3 **Purity** 99%	(Lot 11319AS)	2,523.0	µg/mL	+/- 14.8064 +/- 124.8236 +/- 127.9267	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

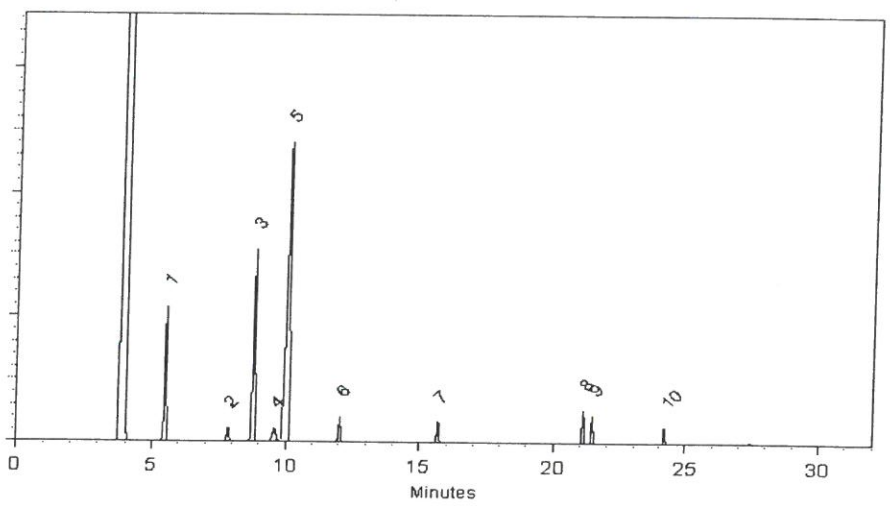
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 05-Nov-2019 **Balance:** B707717271

Fang-Yun Le - QC Analyst

Date Passed: 07-Nov-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

VM570808S_00004

VM570808S-00004 Rec 10/27/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808.SEC **Lot No.:** A0126195

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0.SEC (Lot NWVYK) **Purity** 98%	25,010.4 µg/mL	+/- 146.4413 µg/mL +/- 1,237.3312 µg/mL +/- 1,268.0926 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 * (Lot 170113JLM) **Purity** 99%	2,519.6 µg/mL	+/- 14.7864 µg/mL +/- 124.6554 µg/mL +/- 127.7543 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 * (Lot 1012014) **Purity** 99%	25,013.6 µg/mL	+/- 146.4601 µg/mL +/- 1,237.4903 µg/mL +/- 1,268.2556 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (Isooctane) **CAS #** 540-84-1.SEC (Lot 4597900) **Purity** 99%	2,502.4 µg/mL	+/- 14.6855 µg/mL +/- 123.8044 µg/mL +/- 126.8822 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3.SEC (Lot QBO2D) **Purity** 99%	62,532.0 µg/mL	+/- 366.1197 µg/mL +/- 3,093.6246 µg/mL +/- 3,170.5355 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9.SEC (Lot 6M3NJ) **Purity** 98%	5,012.9 µg/mL	+/- 29.3516 µg/mL +/- 248.0015 µg/mL +/- 254.1671 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5.SEC (Lot 3890000) **Purity** 98%	2,507.6 µg/mL	+/- 14.7161 µg/mL +/- 124.0629 µg/mL +/- 127.1470 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene **CAS #** 526-73-8.SEC **Purity** 96%	(Lot 5602500)	2,505.6 µg/mL	+/- 14.7043 +/- 123.9628 +/- 127.0444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl chloride **CAS #** 100-44-7.SEC **Purity** 99%	(Lot H29N03)	2,506.4 µg/mL	+/- 14.7090 +/- 124.0023 +/- 127.0850	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3,5-Trichlorobenzene **CAS #** 108-70-3.SEC **Purity** 99%	(Lot I28U021)	2,504.0 µg/mL	+/- 14.6949 +/- 123.8836 +/- 126.9633	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

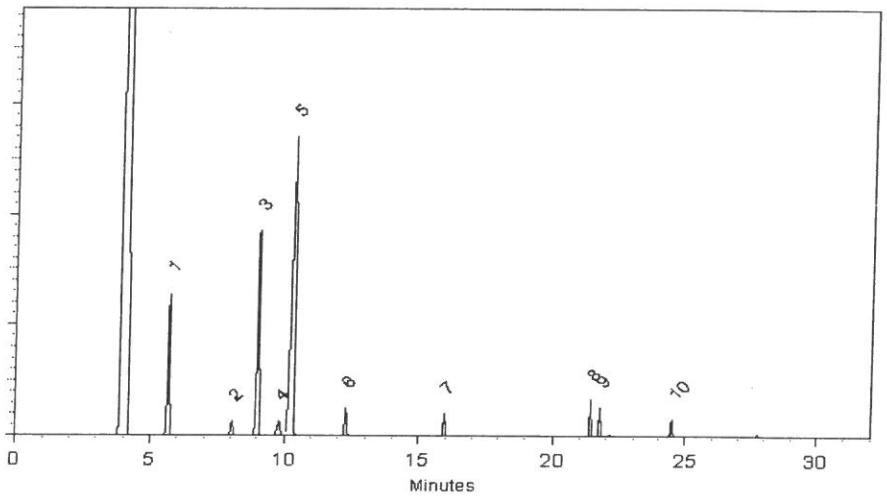
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 27-Mar-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 29-Mar-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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Rec: 1/11/18
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570809 **Lot No.:** A0131668

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2,500-5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate		5,019.0 µg/mL	+/- 29.3873	µg/mL	Gravimetric
	CAS # 141-78-6	(Lot SHBG6401V)		+/- 302.8385	µg/mL	Unstressed
	Purity 99%			+/- 303.5574	µg/mL	Stressed
2	Ethyl acrylate		2,521.0 µg/mL	+/- 14.7946	µg/mL	Gravimetric
	CAS # 140-88-5	(Lot 10129902)		+/- 152.1164	µg/mL	Unstressed
	Purity 99%			+/- 152.4775	µg/mL	Stressed
3	Methyl methacrylate		5,027.5 µg/mL	+/- 29.4371	µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKBV3172V)		+/- 303.3514	µg/mL	Unstressed
	Purity 99%			+/- 304.0715	µg/mL	Stressed
4	Butyl acetate		2,512.0 µg/mL	+/- 14.7418	µg/mL	Gravimetric
	CAS # 123-86-4	(Lot SHBH0056V)		+/- 151.5733	µg/mL	Unstressed
	Purity 99%			+/- 151.9331	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM570809_00007

Rec: 4/20/20
VM570809_00007

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Reference Material Producer
Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570809 **Lot No.:** A0156071

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2,500-5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethyl acetate **CAS #** 141-78-6 (Lot SHBL1336) **Purity** 99%	5,015.6 µg/mL	+/- 29.3674 µg/mL +/- 302.6333 µg/mL +/- 303.3517 µg/mL	Gravimetric Unstressed Stressed
2	Ethyl acrylate **CAS #** 140-88-5 (Lot 10129902) **Purity** 99%	2,508.8 µg/mL	+/- 14.7230 µg/mL +/- 151.3803 µg/mL +/- 151.7396 µg/mL	Gravimetric Unstressed Stressed
3	Methyl methacrylate **CAS #** 80-62-6 (Lot MKCG6589) **Purity** 99%	5,015.2 µg/mL	+/- 29.3651 µg/mL +/- 302.6092 µg/mL +/- 303.3275 µg/mL	Gravimetric Unstressed Stressed
4	Butyl acetate **CAS #** 123-86-4 (Lot SHBK5137) **Purity** 99%	2,512.0 µg/mL	+/- 14.7418 µg/mL +/- 151.5733 µg/mL +/- 151.9331 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM570809S_00004

VM570809S-00004 Rec: 10/27/17

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Catalog No. : 570809.sec **Lot No.:** A0126533

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2500-5000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate **CAS #** 141-78-6.SEC **Purity** 99%	(Lot C386A-GG)	5,005.0 µg/mL	+/- 29.3054 µg/mL +/- 301.9937 µg/mL +/- 302.7106 µg/mL		Gravimetric Unstressed Stressed
2	Ethyl acrylate **CAS #** 140-88-5.SEC **Purity** 99%	(Lot YIFAM-TG)	2,502.0 µg/mL	+/- 14.6831 µg/mL +/- 150.9699 µg/mL +/- 151.3283 µg/mL		Gravimetric Unstressed Stressed
3	Methyl methacrylate **CAS #** 80-62-6.SEC **Purity** 99%	(Lot G01X021)	5,003.5 µg/mL	+/- 29.2966 µg/mL +/- 301.9032 µg/mL +/- 302.6199 µg/mL		Gravimetric Unstressed Stressed
4	Butyl acetate **CAS #** 123-86-4.SEC **Purity** 99%	(Lot V2L2G-GT)	2,505.0 µg/mL	+/- 14.7007 µg/mL +/- 151.1510 µg/mL +/- 151.5098 µg/mL		Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM571992_00001

VM571992_00001 Rec'd 1-25-17

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Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,500.2 µg/mL	+/-	14.5365	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKBW3597V)		+/-	150.8497	µg/mL	Unstressed
	Purity 98%			+/-	151.2078	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
42	Chlorobenzene		2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBF0505V)		+/-	150.8436	µg/mL	Unstressed
	Purity 99%			+/-	151.2017	µg/mL	Stressed
43	m-Xylene		1,250.3 µg/mL	+/-	7.2691	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBG4347V)		+/-	75.4331	µg/mL	Unstressed
	Purity 99%			+/-	75.6122	µg/mL	Stressed
44	p-Xylene		1,251.3 µg/mL	+/-	7.2749	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBG3928V)		+/-	75.4935	µg/mL	Unstressed
	Purity 99%			+/-	75.6727	µg/mL	Stressed
45	Ethylbenzene		2,503.3 µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBG5920V)		+/-	151.0322	µg/mL	Unstressed
	Purity 99%			+/-	151.3907	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.3 µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)		+/-	150.8512	µg/mL	Unstressed
	Purity 99%			+/-	151.2093	µg/mL	Stressed
47	o-Xylene		2,504.9 µg/mL	+/-	14.5636	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH3432V)		+/-	151.1302	µg/mL	Unstressed
	Purity 99%			+/-	151.4890	µg/mL	Stressed
48	Styrene		2,506.3 µg/mL	+/-	14.5716	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKBS7097V)		+/-	151.2132	µg/mL	Unstressed
	Purity 99%			+/-	151.5722	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)		+/-	150.9341	µg/mL	Unstressed
	Purity 99%			+/-	151.2925	µg/mL	Stressed
50	bromoform		2,502.9 µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBD8459V)		+/-	151.0095	µg/mL	Unstressed
	Purity 99%			+/-	151.3681	µg/mL	Stressed
51	bromodichloromethane		2,506.8 µg/mL	+/-	14.5750	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKBW5506V)		+/-	151.2490	µg/mL	Unstressed
	Purity 97%			+/-	151.6081	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)		+/-	150.9115	µg/mL	Unstressed
	Purity 99%			+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,508.5 µg/mL	+/-	14.5846	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)		+/-	151.3489	µg/mL	Unstressed
	Purity 99%			+/-	151.7082	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.8 µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBP6041V)		+/-	150.8817	µg/mL	Unstressed
	Purity 95%			+/-	151.2399	µg/mL	Stressed
55	n-Propylbenzene		2,501.9 µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKBJ0332V)		+/-	150.9492	µg/mL	Unstressed
	Purity 99%			+/-	151.3076	µg/mL	Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBQ2165V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.6 µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ6229V)	2,500.8 µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,505.4 µg/mL	+/- 14.5665 +/- 151.1604 +/- 151.5193	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBS2604V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	2,503.9 µg/mL	+/- 14.5577 +/- 151.0699 +/- 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	2,509.9 µg/mL	+/- 14.5926 +/- 151.4319 +/- 151.7914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.0 µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBC5541V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,506.5 µg/mL	+/- 14.5728 +/- 151.2266 +/- 151.5856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,511.1	µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)			+/-	151.5073	µg/mL	Unstressed
	Purity 99%				+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

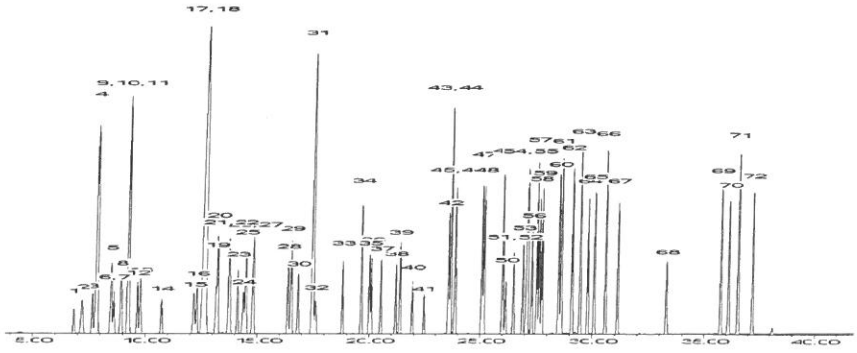
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00002

Rec: 6/15/18 20 vials

VMS71992_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL +/- 150.9115 µg/mL +/- 151.2698 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 µg/mL +/- 151.1453 µg/mL +/- 151.5041 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 µg/mL +/- 151.5299 µg/mL +/- 151.8897 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 µg/mL +/- 1,508.4656 µg/mL +/- 1,512.0470 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 µg/mL +/- 301.7023 µg/mL +/- 302.4186 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 µg/mL +/- 151.0095 µg/mL +/- 151.3681 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 µg/mL +/- 151.8693 µg/mL +/- 152.2299 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3 µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3 µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5 µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8 µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5 µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3 µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5 µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8 µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4 µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3 µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0 µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4 µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9 µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3 µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9 µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6 µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5 µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2 µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3 µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3 µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3 µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9 µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3 µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8 µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5 µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8 µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9 µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,507.0 µg/mL	+/- 14.5759	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)		+/- 151.2584	µg/mL	Unstressed
	Purity 99%			+/- 151.6175	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBQ2165V)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%			+/- 151.2622	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6 µg/mL	+/- 14.5388	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)		+/- 150.8738	µg/mL	Unstressed
	Purity 99%			+/- 151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3 µg/mL	+/- 14.5425	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)		+/- 150.9115	µg/mL	Unstressed
	Purity 99%			+/- 151.2698	µg/mL	Stressed
60	tert-Butylbenzene		2,507.0 µg/mL	+/- 14.5759	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot S52237V)		+/- 151.2584	µg/mL	Unstressed
	Purity 99%			+/- 151.6175	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8 µg/mL	+/- 14.5401	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)		+/- 150.8866	µg/mL	Unstressed
	Purity 98%			+/- 151.2448	µg/mL	Stressed
62	sec-Butylbenzene		2,505.4 µg/mL	+/- 14.5665	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)		+/- 151.1604	µg/mL	Unstressed
	Purity 99%			+/- 151.5193	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBS2604V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,503.9 µg/mL	+/- 14.5577	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)		+/- 151.0699	µg/mL	Unstressed
	Purity 99%			+/- 151.4285	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.9 µg/mL	+/- 14.5926	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS1350V)		+/- 151.4319	µg/mL	Unstressed
	Purity 99%			+/- 151.7914	µg/mL	Stressed
66	n-Butylbenzene		2,503.3 µg/mL	+/- 14.5541	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJV)		+/- 151.0322	µg/mL	Unstressed
	Purity 99%			+/- 151.3907	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,503.8 µg/mL	+/- 14.5570	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBD7331V)		+/- 151.0623	µg/mL	Unstressed
	Purity 99%			+/- 151.4210	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,505.0 µg/mL	+/- 14.5643	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)		+/- 151.1378	µg/mL	Unstressed
	Purity 99%			+/- 151.4966	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,505.3 µg/mL	+/- 14.5657	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)		+/- 151.1528	µg/mL	Unstressed
	Purity 99%			+/- 151.5117	µg/mL	Stressed
70	Hexachlorobutadiene		2,506.5 µg/mL	+/- 14.5728	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)		+/- 151.2266	µg/mL	Unstressed
	Purity 98%			+/- 151.5856	µg/mL	Stressed
71	Naphthalene		2,500.9 µg/mL	+/- 14.5403	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)		+/- 150.8889	µg/mL	Unstressed
	Purity 99%			+/- 151.2471	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

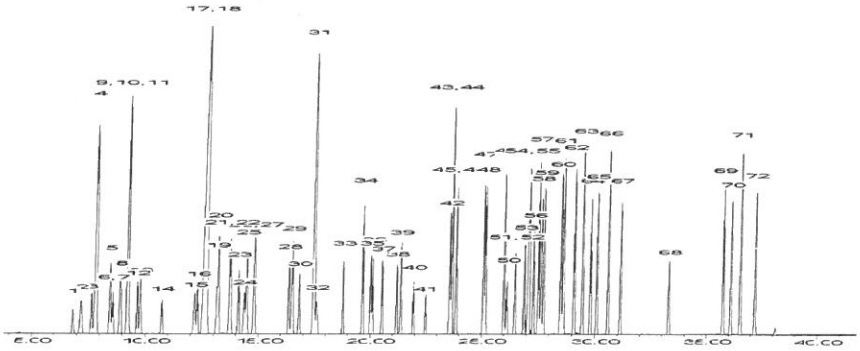
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992_00003

Rec: 5/31/19
VM571992_00003

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBJ5713) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,501.6 µg/mL	+/- 14.5447 µg/mL +/- 150.9341 µg/mL +/- 151.2925 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,501.9 µg/mL	+/- 14.5461 µg/mL +/- 150.9492 µg/mL +/- 151.3076 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBJ9404) **Purity** 99%	25,008.1 µg/mL	+/- 145.3918 µg/mL +/- 1,508.8503 µg/mL +/- 1,512.4325 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.8 µg/mL	+/- 29.0748 µg/mL +/- 301.7174 µg/mL +/- 302.4337 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBH4362V) **Purity** 99%	2,500.6 µg/mL	+/- 14.5388 µg/mL +/- 150.8738 µg/mL +/- 151.2320 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot WXBB7852V) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 µg/mL +/- 150.9567 µg/mL +/- 151.3151 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKCC0877)	2,502.4	µg/mL	+/- 14.5493 +/- 150.9827 +/- 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBH4459V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBJ2338)	1,251.5	µg/mL	+/- 7.2763 +/- 75.5085 +/- 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	1,250.1	µg/mL	+/- 7.2683 +/- 75.4256 +/- 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH7231)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKCC9766)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBG3138V)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 99%	(Lot MKCF8470)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 94%	(Lot MKBX7788V)	2,500.0	µg/mL	+/- 14.5355 +/- 150.8389 +/- 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot WXBC3346V)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/- 14.5348 +/- 150.8320 +/- 151.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

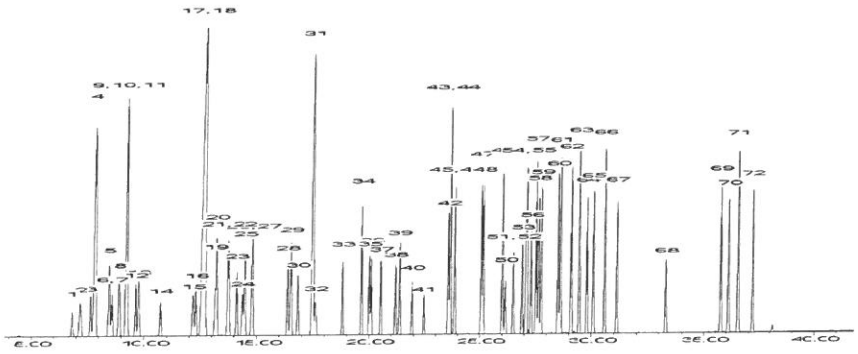
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00002

Rec: 5/24/17

VMS71992S-00002

(10)

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether)	2,501.2 µg/mL	+/- 14.5422	µg/mL	Gravimetric
	CAS # 60-29-7.SEC (Lot F23X068)		+/- 150.9088	µg/mL	Unstressed
	Purity 98%		+/- 151.2671	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.1 µg/mL	+/- 14.5418	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/- 150.9040	µg/mL	Unstressed
	Purity 99%		+/- 151.2622	µg/mL	Stressed
3	1,1-Dichloroethene	2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 2767000)		+/- 150.8662	µg/mL	Unstressed
	Purity 99%		+/- 151.2244	µg/mL	Stressed
4	tert-Butanol (TBA)	25,003.1 µg/mL	+/- 145.3626	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot XYXDO)		+/- 1,508.5475	µg/mL	Unstressed
	Purity 98%		+/- 1,512.1291	µg/mL	Stressed
5	Methyl acetate	5,000.4 µg/mL	+/- 29.0726	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot YDGVD)		+/- 301.6948	µg/mL	Unstressed
	Purity 99%		+/- 302.4111	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.4 µg/mL	+/- 14.5374	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/- 150.8587	µg/mL	Unstressed
	Purity 99%		+/- 151.2169	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,500.1 µg/mL	+/- 14.5358	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot VEBOC)		+/- 150.8423	µg/mL	Unstressed
	Purity 98%		+/- 151.2004	µg/mL	Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 99%	(Lot MKBL1376V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC **Purity** 99%	(Lot UERIL)	25,000.9 µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC **Purity** 99%	(Lot ZAQTA-MS)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC **Purity** 98%	(Lot HGC01-BLKT)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC **Purity** 99%	(Lot 10188491)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC **Purity** 99%	(Lot 5379000)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC **Purity** 98%	(Lot 17E8E)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC **Purity** 97%	(Lot TS5UB)	2,500.2 µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC **Purity** 99%	(Lot 83NHH)	62,506.9 µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC **Purity** 99%	(Lot 1297547)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC **Purity** 99%	(Lot 5670200)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC **Purity** 99%	(Lot K3V7J-SJ)	5,002.3 µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC **Purity** 98%	(Lot CS160712)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC **Purity** 99%	(Lot YADRA)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC **Purity** 96%	(Lot 5221100)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,501.0	µg/mL	+/- +/- +/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot 24MSD-CD)	2,500.9	µg/mL	+/- +/- +/-	14.5403 150.8889 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,501.1	µg/mL	+/- +/- +/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot MUFZH)	50,007.1	µg/mL	+/- +/- +/-	290.7305 3,017.1500 3,024.3132	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.6	µg/mL	+/- +/- +/-	14.5447 150.9341 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,500.1	µg/mL	+/- +/- +/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,500.0	µg/mL	+/- +/- +/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot ZDMSL)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 5034600)	2,500.8	µg/mL	+/- +/- +/-	14.5401 150.8866 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,500.5	µg/mL	+/- +/- +/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.3	µg/mL	+/- +/- +/-	14.5425 150.9115 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,500.4 µg/mL	+/- 14.5376 +/- 150.8613 +/- 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9 µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.5 µg/mL	+/- 7.2705 +/- 75.4482 +/- 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,502.3 µg/mL	+/- 14.5483 +/- 150.9718 +/- 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

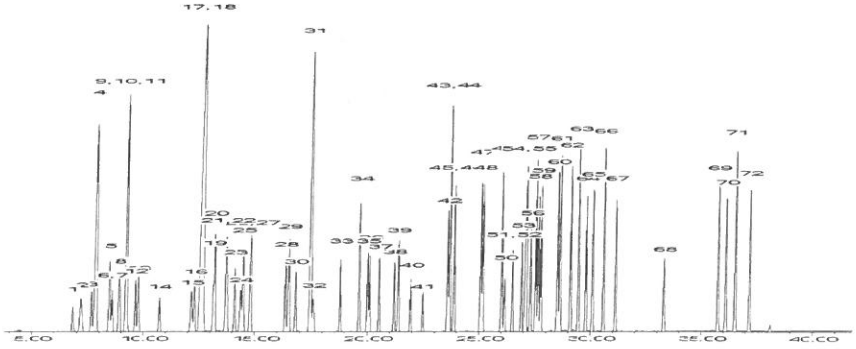
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00004

Rec: 12/4/18

VM571992S-00004

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot [illegible]) **Purity** 99%		2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 99%	(Lot MKBL1376V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC **Purity** 99%	(Lot UERIL)	25,000.9 µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC **Purity** 99%	(Lot ZAQTA-MS)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC **Purity** 98%	(Lot HGC01-BLKT)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC **Purity** 99%	(Lot 10188491)	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC **Purity** 99%	(Lot 5379000)	2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC **Purity** 98%	(Lot I7E8E)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC **Purity** 97%	(Lot TS5UB)	2,500.2 µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC **Purity** 99%	(Lot 83NHH)	62,506.9 µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC **Purity** 99%	(Lot 1297547)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC **Purity** 99%	(Lot 5670200)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC **Purity** 99%	(Lot K3V7J-SJ)	5,002.3 µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC **Purity** 98%	(Lot CS160712)	2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC **Purity** 99%	(Lot YADRA)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC **Purity** 96%	(Lot 5221100)	2,501.3 µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot 24MSD-CD)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot MUFZH)	50,007.1	µg/mL	+/- 290.7305 +/- 3,017.1500 +/- 3,024.3132	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot ZDMSL)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 5034600)	2,500.8	µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,500.4 µg/mL	+/- 14.5376 +/- 150.8613 +/- 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9 µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.5 µg/mL	+/- 7.2705 +/- 75.4482 +/- 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,502.3 µg/mL	+/- 14.5483 +/- 150.9718 +/- 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1.SEC **Purity** 99%	(Lot 2FUHG-EM)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8.SEC **Purity** 99%	(Lot TOOOF)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8.SEC **Purity** 99%	(Lot SW8QG-AO)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4.SEC **Purity** 99%	(Lot P4XHJ-AO)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6.SEC **Purity** 99%	(Lot OGN01-CAI)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6.SEC **Purity** 99%	(Lot SC7LO-QA)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8.SEC **Purity** 99%	(Lot OGN01-IMA)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) **CAS #** 99-87-6.SEC **Purity** 99%	(Lot 5221800)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	(Lot FMDFD)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	(Lot 4Y5DC)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8.SEC **Purity** 99%	(Lot OGN01-PNP)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1.SEC **Purity** 99%	(Lot R6QDM)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8.SEC **Purity** 98%	(Lot LC00408V)	2,501.5	µg/mL	+/- 14.5436 +/- 150.9236 +/- 151.2819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1.SEC **Purity** 99%	(Lot 3LYYC)	2,502.5	µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3.SEC **Purity** 97%	(Lot 5526800)	2,501.4	µg/mL	+/- 14.5433 +/- 150.9198 +/- 151.2781	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3.SEC **Purity** 99%	(Lot SKZ5N)	2,501.8	µg/mL	+/- 14.5454 +/- 150.9417 +/- 151.3000	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

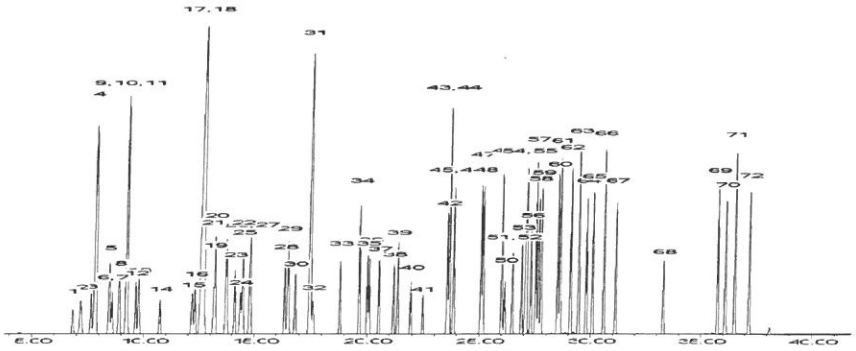
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00006

Rec: 9/9/19
VM571992S-00006

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 µg/mL +/- 151.8598 µg/mL +/- 152.2203 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 µg/mL +/- 151.2383 µg/mL +/- 151.5974 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 µg/mL +/- 151.0372 µg/mL +/- 151.3958 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 µg/mL +/- 1,508.4071 µg/mL +/- 1,511.9883 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 µg/mL +/- 301.8129 µg/mL +/- 302.5295 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 µg/mL +/- 151.5400 µg/mL +/- 151.8998 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 +/- 151.2383 +/- 151.5974	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%	2,500.7 µg/mL	+/- 14.5391 +/- 150.8763 +/- 151.2345	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 +/- 1,508.4304 +/- 1,512.0117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZHKYA) **Purity** 99%	2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%	2,501.3 µg/mL	+/- 14.5427 +/- 150.9137 +/- 151.2720	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot K24W001) **Purity** 97%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%	2,503.2 µg/mL	+/- 14.5541 +/- 151.0320 +/- 151.3905	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%	2,501.0 µg/mL	+/- 14.5409 +/- 150.8954 +/- 151.2537	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot PH2XK) **Purity** 99%	62,508.3 µg/mL	+/- 363.4098 +/- 3,771.4029 +/- 3,780.3569	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%	2,507.0 µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot 8DAOJ) **Purity** 99%	5,006.7 µg/mL	+/- 29.1092 +/- 302.0744 +/- 302.7916	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot 7998000) **Purity** 99%	2,507.7 µg/mL	+/- 14.5798 +/- 151.2986 +/- 151.6579	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 +/- 151.3188 +/- 151.6780	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%	2,502.4 µg/mL	+/- 14.5492 +/- 150.9809 +/- 151.3393	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride		2,510.3 µg/mL	+/- 14.5953	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)		+/- 151.4595	µg/mL	Unstressed
	Purity 99%			+/- 151.8191	µg/mL	Stressed
25	n-Heptane (C7)		2,511.8 µg/mL	+/- 14.6040	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)		+/- 151.5500	µg/mL	Unstressed
	Purity 99%			+/- 151.9098	µg/mL	Stressed
26	1,2-Dichloroethane		2,501.3 µg/mL	+/- 14.5430	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)		+/- 150.9165	µg/mL	Unstressed
	Purity 99%			+/- 151.2748	µg/mL	Stressed
27	Benzene		2,504.8 µg/mL	+/- 14.5633	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)		+/- 151.1277	µg/mL	Unstressed
	Purity 99%			+/- 151.4865	µg/mL	Stressed
28	Trichloroethene		2,508.7 µg/mL	+/- 14.5856	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)		+/- 151.3590	µg/mL	Unstressed
	Purity 99%			+/- 151.7183	µg/mL	Stressed
29	Methylcyclohexane		2,504.5 µg/mL	+/- 14.5614	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot Q02QG)		+/- 151.1076	µg/mL	Unstressed
	Purity 99%			+/- 151.4663	µg/mL	Stressed
30	1,2-Dichloropropane		2,504.0 µg/mL	+/- 14.5585	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)		+/- 151.0774	µg/mL	Unstressed
	Purity 99%			+/- 151.4361	µg/mL	Stressed
31	1,4-Dioxane		50,008.0 µg/mL	+/- 290.7356	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot YVP2C)		+/- 3,017.2028	µg/mL	Unstressed
	Purity 99%			+/- 3,024.3661	µg/mL	Stressed
32	Dibromomethane		2,509.5 µg/mL	+/- 14.5904	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)		+/- 151.4093	µg/mL	Unstressed
	Purity 99%			+/- 151.7687	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,502.0 µg/mL	+/- 14.5468	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)		+/- 150.9567	µg/mL	Unstressed
	Purity 99%			+/- 151.3151	µg/mL	Stressed
34	Toluene		2,501.5 µg/mL	+/- 14.5439	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)		+/- 150.9266	µg/mL	Unstressed
	Purity 99%			+/- 151.2849	µg/mL	Stressed
35	Ethyl methacrylate		2,508.8 µg/mL	+/- 14.5866	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)		+/- 151.3690	µg/mL	Unstressed
	Purity 99%			+/- 151.7284	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,502.9 µg/mL	+/- 14.5520	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)		+/- 151.0098	µg/mL	Unstressed
	Purity 96%			+/- 151.3684	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,502.5 µg/mL	+/- 14.5498	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)		+/- 150.9869	µg/mL	Unstressed
	Purity 99%			+/- 151.3454	µg/mL	Stressed
38	1,3-Dichloropropane		2,502.7 µg/mL	+/- 14.5507	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)		+/- 150.9970	µg/mL	Unstressed
	Purity 99%			+/- 151.3555	µg/mL	Stressed
39	Tetrachloroethene		2,505.0 µg/mL	+/- 14.5643	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)		+/- 151.1378	µg/mL	Unstressed
	Purity 99%			+/- 151.4966	µg/mL	Stressed

40	Dibromochloromethane		2,502.4 µg/mL	+/-	14.5494	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)		+/-	150.9832	µg/mL	Unstressed
	Purity 97%			+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,503.3 µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)		+/-	151.0372	µg/mL	Unstressed
	Purity 99%			+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene		2,504.8 µg/mL	+/-	14.5633	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)		+/-	151.1277	µg/mL	Unstressed
	Purity 99%			+/-	151.4865	µg/mL	Stressed
43	m-Xylene		1,251.7 µg/mL	+/-	7.2941	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)		+/-	75.5202	µg/mL	Unstressed
	Purity 99%			+/-	75.6995	µg/mL	Stressed
44	p-Xylene		1,253.7 µg/mL	+/-	7.3058	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)		+/-	75.6409	µg/mL	Unstressed
	Purity 99%			+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene		2,503.5 µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)		+/-	151.0472	µg/mL	Unstressed
	Purity 99%			+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,506.7 µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)		+/-	151.2383	µg/mL	Unstressed
	Purity 99%			+/-	151.5974	µg/mL	Stressed
47	o-Xylene		2,504.2 µg/mL	+/-	14.5594	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)		+/-	151.0875	µg/mL	Unstressed
	Purity 99%			+/-	151.4462	µg/mL	Stressed
48	Styrene		2,507.2 µg/mL	+/-	14.5769	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)		+/-	151.2685	µg/mL	Unstressed
	Purity 99%			+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,505.2 µg/mL	+/-	14.5653	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)		+/-	151.1478	µg/mL	Unstressed
	Purity 99%			+/-	151.5067	µg/mL	Stressed
50	Bromoform		2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5461400)		+/-	150.8661	µg/mL	Unstressed
	Purity 97%			+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane		2,501.3 µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)		+/-	150.9137	µg/mL	Unstressed
	Purity 98%			+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)		+/-	150.9567	µg/mL	Unstressed
	Purity 99%			+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,505.7 µg/mL	+/-	14.5682	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)		+/-	151.1780	µg/mL	Unstressed
	Purity 99%			+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,514.2 µg/mL	+/-	14.6177	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)		+/-	151.6922	µg/mL	Unstressed
	Purity 98%			+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene		2,503.7 µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)		+/-	151.0573	µg/mL	Unstressed
	Purity 99%			+/-	151.4159	µg/mL	Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2 µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	151.5740	µg/mL	Unstressed
	Purity 98%			+/-	151.9338	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

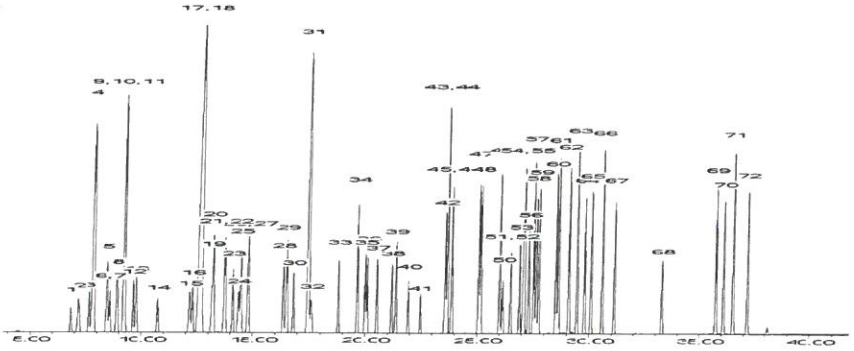
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571993_00001

VM571993-0001 Rec: 2-1-17

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993 **Lot No.:** A0123796

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2500-25,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile **CAS #** 75-05-8 **Purity** 98%	(Lot SHBB3177V)	25,004.5 µg/mL	+/- 145.3705 µg/mL +/- 1,236.9157 µg/mL +/- 1,267.6727 µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) **CAS #** 108-20-3 **Purity** 99%	(Lot SHBC0391V)	2,505.0 µg/mL	+/- 14.5643 µg/mL +/- 123.9170 µg/mL +/- 126.9983 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) **CAS #** 637-92-3 **Purity** 99%	(Lot MKBT8400V)	2,501.5 µg/mL	+/- 14.5439 µg/mL +/- 123.7438 µg/mL +/- 126.8208 µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile **CAS #** 107-12-0 **Purity** 99%	(Lot BCBM6569V)	25,003.8 µg/mL	+/- 145.3664 µg/mL +/- 1,236.8808 µg/mL +/- 1,267.6370 µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol **CAS #** 75-85-4 **Purity** 99%	(Lot STBB1898V)	25,006.0 µg/mL	+/- 145.3794 µg/mL +/- 1,236.9921 µg/mL +/- 1,267.7510 µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) **CAS #** 994-05-8 **Purity** 98%	(Lot HMBD8698V)	2,505.4 µg/mL	+/- 14.5664 µg/mL +/- 123.9353 µg/mL +/- 127.0170 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571993_00003

VM571993-00003 Rec: 12/4/18

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993 **Lot No.:** A0139911

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2,500-25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetonitrile		25,212.5 µg/mL	+/- 147.6247 µg/mL		Gravimetric
	CAS # 75-05-8	(Lot SHBH6233)		+/- 1,247.3304 µg/mL		Unstressed
	Purity 99%			+/- 1,278.3404 µg/mL		Stressed
2	Diisopropyl ether (DIPE)		2,525.0 µg/mL	+/- 14.8181 µg/mL		Gravimetric
	CAS # 108-20-3	(Lot SHBC0391V)		+/- 124.9226 µg/mL		Unstressed
	Purity 99%			+/- 128.0281 µg/mL		Stressed
3	Ethyl-tert-butyl ether (ETBE)		2,518.5 µg/mL	+/- 14.7800 µg/mL		Gravimetric
	CAS # 637-92-3	(Lot MKCC2702)		+/- 124.6010 µg/mL		Unstressed
	Purity 99%			+/- 127.6985 µg/mL		Stressed
4	Propionitrile		25,227.5 µg/mL	+/- 147.7126 µg/mL		Gravimetric
	CAS # 107-12-0	(Lot BCBV8545)		+/- 1,248.0725 µg/mL		Unstressed
	Purity 99%			+/- 1,279.1009 µg/mL		Stressed
5	tert-Amyl alcohol		25,152.5 µg/mL	+/- 147.2734 µg/mL		Gravimetric
	CAS # 75-85-4	(Lot STBB1898V)		+/- 1,244.3621 µg/mL		Unstressed
	Purity 99%			+/- 1,275.2982 µg/mL		Stressed
6	tert-Amyl methyl ether (TAME)		2,525.0 µg/mL	+/- 14.8181 µg/mL		Gravimetric
	CAS # 994-05-8	(Lot HMBF8365V)		+/- 124.9226 µg/mL		Unstressed
	Purity 99%			+/- 128.0281 µg/mL		Stressed

Reagent

VM571993_00004

Rec: 6-11-20
VM571993_00004

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993 **Lot No.:** A0158947

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2,500-25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetonitrile **CAS #** 75-05-8 (Lot SHBH6233) **Purity** 99%	25,021.3 µg/mL	+/- 146.5054 +/- 1,237.8729 +/- 1,268.6477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) **CAS #** 108-20-3 (Lot SHBH1927V) **Purity** 99%	2,503.7 µg/mL	+/- 14.6929 +/- 123.8671 +/- 126.9464	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) **CAS #** 637-92-3 (Lot MKCG1429) **Purity** 99%	2,502.3 µg/mL	+/- 14.6851 +/- 123.8011 +/- 126.8788	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile **CAS #** 107-12-0 (Lot BCBW0865) **Purity** 99%	25,038.0 µg/mL	+/- 146.6030 +/- 1,238.6975 +/- 1,269.4928	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol **CAS #** 75-85-4 (Lot STBG1140V) **Purity** 99%	25,036.7 µg/mL	+/- 146.5952 +/- 1,238.6315 +/- 1,269.4252	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) **CAS #** 994-05-8 (Lot HMBG6382V) **Purity** 99%	2,502.7 µg/mL	+/- 14.6871 +/- 123.8176 +/- 126.8957	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Reagent

VM571993S_00002

Rec: 2-1-17

VM571993s - 00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571993.sec **Lot No.:** A0123771

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2500-25,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile **CAS #** 75-05-8.SEC (Lot 7KGDA) **Purity** 99%	25,091.5 µg/mL	+/- 146.9162 µg/mL +/- 1,241.3442 µg/mL +/- 1,272.2054 µg/mL	Gravimetric Unstressed Stressed
2	Diisopropyl ether (DIPE) **CAS #** 108-20-3.SEC (Lot LL7TN-SH) **Purity** 98%	2,525.0 µg/mL	+/- 14.8179 µg/mL +/- 124.9211 µg/mL +/- 128.0265 µg/mL	Gravimetric Unstressed Stressed
3	Ethyl-tert-butyl ether (ETBE) **CAS #** 637-92-3.SEC (Lot MHBJG-QK) **Purity** 99%	2,509.0 µg/mL	+/- 14.7242 µg/mL +/- 124.1310 µg/mL +/- 127.2168 µg/mL	Gravimetric Unstressed Stressed
4	Propionitrile **CAS #** 107-12-0.SEC (Lot RTXQL) **Purity** 99%	25,125.5 µg/mL	+/- 147.1153 µg/mL +/- 1,243.0263 µg/mL +/- 1,273.9293 µg/mL	Gravimetric Unstressed Stressed
5	tert-Amyl alcohol **CAS #** 75-85-4.SEC (Lot MMGO1) **Purity** 99%	25,056.0 µg/mL	+/- 146.7084 µg/mL +/- 1,239.5880 µg/mL +/- 1,270.4054 µg/mL	Gravimetric Unstressed Stressed
6	tert-Amyl methyl ether (TAME) **CAS #** 994-05-8.SEC (Lot 5614600) **Purity** 99%	2,517.5 µg/mL	+/- 14.7741 µg/mL +/- 124.5515 µg/mL +/- 127.6478 µg/mL	Gravimetric Unstressed Stressed

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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-081220	240-134931-1	102	99	103	92
MSA-SW37A-081220	240-134931-1	106	104	105	93
MSA-SW37B-081220	240-134931-2	106	104	107	94
MSA-SW37B-081220	240-134931-2	107	104	108	95
MSA-SW37C-081220	240-134931-3	107	106	106	97
MSA-SW37C-081220	240-134931-3	105	103	104	93
MSA-SW37D-081220	240-134931-4	102	101	103	91
MSA-SW37D-081220	240-134931-4	103	100	101	88
MSA-SW38A-081220	240-134931-5	105	102	105	93
MSA-SW38A-081220	240-134931-5	106	105	105	95
MSA-SW38B-081220	240-134931-6	104	104	103	93
MSA-SW38B-081220	240-134931-6	108	106	107	93
MSA-SW38C-081220	240-134931-7	105	104	105	95
MSA-SW38D-081220	240-134931-8	106	103	105	95
MSA-SW38D-081220	240-134931-8	106	106	106	90
MSA-SW40A-081220	240-134931-9	103	103	104	94
MSA-SW40A-081220	240-134931-9	103	102	102	90
MSA-SW40B-081220	240-134931-10	107	104	106	94
MSA-SW40B-081220	240-134931-10	105	102	103	89
MSA-SW40C-081220	240-134931-11	105	105	105	94
MSA-SW40D-081220	240-134931-12	104	104	101	92
MSA-SW41A-081220	240-134931-13	104	103	103	89
MSA-SW41B-081220	240-134931-14	106	105	107	93
MSA-SW41C-081220	240-134931-15	107	106	103	92
MSA-SW41D-081220	240-134931-16	89	94	102	110
MSA-SW42A-081220	240-134931-17	89	93	101	106
MSA-SW42B-081220	240-134931-18	107	106	105	95
MSA-SW42B-081220	240-134931-18	105	104	105	93
MSA-SW42C-081220	240-134931-19	104	102	103	93
MSA-SW42C-081220	240-134931-19	105	104	106	94
MSA-SW42D-081220	240-134931-20	106	105	105	94
MSA-SW43A-081220	240-134931-21	105	103	104	94
MSA-SW43B-081220	240-134931-22	106	104	105	94
MSA-SW43C-081220	240-134931-23	105	104	105	92
MSA-SW43D-081220	240-134931-24	103	103	103	93

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-129
DCA = 1,2-Dichloroethane-d4 (Surr)	75-130
TOL = Toluene-d8 (Surr)	69-122
BFB = 4-Bromofluorobenzene (Surr)	47-134

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MSA-SW44A-081220	240-134931-25	101	101	102	92
MSA-SW44B-081220	240-134931-26	106	107	106	95
MSA-SW44C-081220	240-134931-27	105	105	103	93
MSA-SW44D-081220	240-134931-28	104	104	105	93
TB-081220	240-134931-29	105	105	104	92
MSA-SW46A-081220	240-134931-30	104	102	101	90
MSA-SW46A-081220	240-134931-30	105	105	106	91
MSA-SW47A-081220	240-134931-31	103	101	100	88
MSA-SW47A-081220	240-134931-31	107	106	105	92
MSA-SW48A-081220	240-134931-32	106	105	105	93
MSA-SW48A-081220	240-134931-32	106	104	102	89
MSA-SW49A-081220	240-134931-33	107	106	106	93
MSA-SW49A-081220	240-134931-33	107	106	108	94
	MB 240-447281/8	105	103	106	96
	MB 240-447506/8	104	104	108	96
	MB 240-447698/8	105	104	107	97
	MB 240-447867/8	83	87	96	101
	LCS 240-447281/5	96	93	108	102
	LCS 240-447506/5	97	96	109	106
	LCS 240-447698/5	99	97	110	105
	LCS 240-447867/5	89	90	100	107
	200-54623-C-4 MS	96	93	107	102
	240-135021-B-1 MS	92	92	103	109
	200-54623-C-4 MSD	96	94	107	102
	240-135021-B-1 MSD	93	94	105	110

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-129
DCA = 1,2-Dichloroethane-d4 (Surr)	75-130
TOL = Toluene-d8 (Surr)	69-122
BFB = 4-Bromofluorobenzene (Surr)	47-134

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916362.d

Lab ID: LCS 240-447281/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.0	100	77-120	
1,1,1-Trichloroethane	20.0	18.5	93	65-141	
1,1,2,2-Tetrachloroethane	20.0	23.6	118	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	20.4	102	54-148	
1,1-Dichloroethane	20.0	21.1	105	74-126	
1,1-Dichloroethene	20.0	19.4	97	73-129	
1,1-Dichloropropene	20.0	20.4	102	78-120	
1,2,3-Trichlorobenzene	20.0	18.5	93	42-126	
1,2,3-Trichloropropane	20.0	21.3	107	57-137	
1,2,4-Trichlorobenzene	20.0	16.7	83	47-120	
1,2,4-Trimethylbenzene	20.0	21.2	106	66-129	
1,2-Dibromo-3-Chloropropane	20.0	19.8	99	34-136	
1,2-Dichlorobenzene	20.0	20.9	104	74-120	
1,2-Dichloroethane	20.0	18.0	90	66-129	
1,2-Dichloropropane	20.0	21.6	108	79-127	
1,3-Dichlorobenzene	20.0	19.3	96	74-120	
1,3-Dichloropropane	20.0	21.8	109	74-122	
1,4-Dichlorobenzene	20.0	19.1	95	75-120	
2,2-Dichloropropane	20.0	22.4	112	67-137	
2-Chloroethyl vinyl ether	20.0	39.3	196	29-146	*
2-Chlorotoluene	20.0	21.3	106	73-126	
2-Hexanone	40.0	42.9	107	43-142	
Bromobenzene	20.0	19.3	96	77-120	
Bromochloromethane	20.0	19.8	99	70-128	
4-Chlorotoluene	20.0	20.5	102	73-126	
p-Isopropyltoluene	20.0	20.2	101	66-127	
Acetone	40.0	48.4	121	33-155	
Benzene	20.0	21.4	107	77-123	
Bromoform	20.0	17.3	86	47-133	
Bromomethane	20.0	18.5	92	48-144	
Carbon disulfide	20.0	19.5	98	67-127	
Carbon tetrachloride	20.0	17.7	88	61-142	
Chlorobenzene	20.0	20.3	102	80-120	
Chloroethane	20.0	21.7	108	41-147	
Chloroform	20.0	19.8	99	74-127	
Chloromethane	20.0	20.8	104	46-148	
cis-1,2-Dichloroethene	20.0	19.2	96	75-124	
cis-1,3-Dichloropropene	20.0	19.3	97	68-128	
Hexachlorobutadiene	20.0	14.1	71	40-120	
Dibromomethane	20.0	16.2	81	67-121	
Bromodichloromethane	20.0	18.6	93	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916362.d

Lab ID: LCS 240-447281/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	17.2	86	35-137	
Ethylbenzene	20.0	20.5	102	80-120	
1,2-Dibromoethane	20.0	19.6	98	73-120	
Naphthalene	20.0	20.8	104	28-130	
m-Xylene & p-Xylene	20.0	20.8	104	79-121	
n-Butylbenzene	20.0	20.1	100	54-129	
Isopropylbenzene	20.0	20.7	103	73-123	
n-Propylbenzene	20.0	21.0	105	67-130	
2-Butanone	40.0	40.1	100	41-151	
4-Methyl-2-pentanone	40.0	41.4	103	43-145	
sec-Butylbenzene	20.0	20.6	103	60-131	
Methyl tert-butyl ether	20.0	19.4	97	57-127	
Methylene Chloride	20.0	20.6	103	63-134	
o-Xylene	20.0	21.1	105	75-123	
Styrene	20.0	20.7	103	75-121	
tert-Butylbenzene	20.0	19.6	98	63-126	
Tetrachloroethene	20.0	18.1	91	70-125	
Toluene	20.0	21.5	108	79-122	
trans-1,2-Dichloroethene	20.0	20.4	102	74-130	
trans-1,3-Dichloropropene	20.0	19.6	98	64-120	
Trichloroethene	20.0	18.2	91	71-121	
Trichlorofluoromethane	20.0	16.9	84	52-148	
Vinyl acetate	20.0	21.5	107	44-160	
Vinyl chloride	20.0	21.4	107	61-134	
tert-Butyl alcohol	200	225	112	15-169	
Xylenes, Total	40.0	41.9	105	78-122	
Dibromochloromethane	20.0	19.3	97	75-120	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916392.d

Lab ID: LCS 240-447506/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.2	101	77-120	
1,1,1-Trichloroethane	20.0	18.4	92	65-141	
1,1,2,2-Tetrachloroethane	20.0	24.2	121	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.9	100	54-148	
1,1-Dichloroethane	20.0	21.1	106	74-126	
1,1-Dichloroethene	20.0	19.4	97	73-129	
1,1-Dichloropropene	20.0	20.6	103	78-120	
1,2,3-Trichlorobenzene	20.0	18.8	94	42-126	
1,2,3-Trichloropropane	20.0	21.0	105	57-137	
1,2,4-Trichlorobenzene	20.0	17.3	86	47-120	
1,2,4-Trimethylbenzene	20.0	20.8	104	66-129	
1,2-Dibromo-3-Chloropropane	20.0	20.9	105	34-136	
1,2-Dichlorobenzene	20.0	20.8	104	74-120	
1,2-Dichloroethane	20.0	18.4	92	66-129	
1,2-Dichloropropane	20.0	21.6	108	79-127	
1,3-Dichlorobenzene	20.0	19.4	97	74-120	
1,3-Dichloropropane	20.0	21.8	109	74-122	
1,4-Dichlorobenzene	20.0	18.8	94	75-120	
2,2-Dichloropropane	20.0	23.5	117	67-137	
2-Chloroethyl vinyl ether	20.0	39.4	197	29-146	*
2-Chlorotoluene	20.0	21.0	105	73-126	
2-Hexanone	40.0	44.7	112	43-142	
Bromobenzene	20.0	18.6	93	77-120	
Bromochloromethane	20.0	21.0	105	70-128	
4-Chlorotoluene	20.0	20.1	100	73-126	
p-Isopropyltoluene	20.0	19.8	99	66-127	
Acetone	40.0	57.4	143	33-155	
Benzene	20.0	21.5	108	77-123	
Bromoform	20.0	18.0	90	47-133	
Bromomethane	20.0	18.5	93	48-144	
Carbon disulfide	20.0	19.7	99	67-127	
Carbon tetrachloride	20.0	17.8	89	61-142	
Chlorobenzene	20.0	20.3	102	80-120	
Chloroethane	20.0	21.4	107	41-147	
Chloroform	20.0	20.0	100	74-127	
Chloromethane	20.0	20.4	102	46-148	
cis-1,2-Dichloroethene	20.0	19.7	99	75-124	
cis-1,3-Dichloropropene	20.0	19.7	98	68-128	
Hexachlorobutadiene	20.0	14.3	72	40-120	
Dibromomethane	20.0	16.3	82	67-121	
Bromodichloromethane	20.0	18.5	93	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916392.d

Lab ID: LCS 240-447506/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	17.5	88	35-137	
Ethylbenzene	20.0	20.6	103	80-120	
1,2-Dibromoethane	20.0	20.0	100	73-120	
Naphthalene	20.0	21.6	108	28-130	
m-Xylene & p-Xylene	20.0	21.1	106	79-121	
n-Butylbenzene	20.0	20.1	100	54-129	
Isopropylbenzene	20.0	20.9	104	73-123	
n-Propylbenzene	20.0	21.0	105	67-130	
2-Butanone	40.0	45.4	113	41-151	
4-Methyl-2-pentanone	40.0	43.7	109	43-145	
sec-Butylbenzene	20.0	20.0	100	60-131	
Methyl tert-butyl ether	20.0	20.0	100	57-127	
Methylene Chloride	20.0	20.8	104	63-134	
o-Xylene	20.0	21.3	107	75-123	
Styrene	20.0	21.0	105	75-121	
tert-Butylbenzene	20.0	18.9	94	63-126	
Tetrachloroethene	20.0	18.4	92	70-125	
Toluene	20.0	21.9	110	79-122	
trans-1,2-Dichloroethene	20.0	20.3	101	74-130	
trans-1,3-Dichloropropene	20.0	19.9	99	64-120	
Trichloroethene	20.0	18.3	91	71-121	
Trichlorofluoromethane	20.0	17.0	85	52-148	
Vinyl acetate	20.0	21.7	109	44-160	
Vinyl chloride	20.0	21.4	107	61-134	
tert-Butyl alcohol	200	338	169	15-169	
Xylenes, Total	40.0	42.4	106	78-122	
Dibromochloromethane	20.0	19.4	97	75-120	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916422.d

Lab ID: LCS 240-447698/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	19.3	96	77-120	
1,1,1-Trichloroethane	20.0	15.8	79	65-141	
1,1,2,2-Tetrachloroethane	20.0	23.3	116	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	17.1	86	54-148	
1,1-Dichloroethane	20.0	19.9	99	74-126	
1,1-Dichloroethene	20.0	16.9	85	73-129	
1,1-Dichloropropene	20.0	17.8	89	78-120	
1,2,3-Trichlorobenzene	20.0	18.1	91	42-126	
1,2,3-Trichloropropane	20.0	20.9	105	57-137	
1,2,4-Trichlorobenzene	20.0	16.1	81	47-120	
1,2,4-Trimethylbenzene	20.0	19.5	98	66-129	
1,2-Dibromo-3-Chloropropane	20.0	19.9	100	34-136	
1,2-Dichlorobenzene	20.0	20.1	100	74-120	
1,2-Dichloroethane	20.0	18.1	91	66-129	
1,2-Dichloropropane	20.0	20.7	103	79-127	
1,3-Dichlorobenzene	20.0	18.4	92	74-120	
1,3-Dichloropropane	20.0	21.5	107	74-122	
1,4-Dichlorobenzene	20.0	18.2	91	75-120	
2,2-Dichloropropane	20.0	18.3	92	67-137	
2-Chloroethyl vinyl ether	20.0	39.8	199	29-146	*
2-Chlorotoluene	20.0	19.5	98	73-126	
2-Hexanone	40.0	43.7	109	43-142	
Bromobenzene	20.0	18.1	91	77-120	
Bromochloromethane	20.0	20.1	101	70-128	
4-Chlorotoluene	20.0	19.0	95	73-126	
p-Isopropyltoluene	20.0	17.5	87	66-127	
Acetone	40.0	52.6	131	33-155	
Benzene	20.0	20.1	100	77-123	
Bromoform	20.0	17.1	86	47-133	
Bromomethane	20.0	19.1	96	48-144	
Carbon disulfide	20.0	17.0	85	67-127	
Carbon tetrachloride	20.0	14.9	74	61-142	
Chlorobenzene	20.0	19.2	96	80-120	
Chloroethane	20.0	22.1	111	41-147	
Chloroform	20.0	19.4	97	74-127	
Chloromethane	20.0	22.2	111	46-148	
cis-1,2-Dichloroethene	20.0	18.7	93	75-124	
cis-1,3-Dichloropropene	20.0	19.3	96	68-128	
Hexachlorobutadiene	20.0	13.0	65	40-120	
Dibromomethane	20.0	15.7	79	67-121	
Bromodichloromethane	20.0	17.9	89	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916422.d

Lab ID: LCS 240-447698/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	19.9	99	35-137	
Ethylbenzene	20.0	18.5	93	80-120	
1,2-Dibromoethane	20.0	19.3	96	73-120	
Naphthalene	20.0	20.8	104	28-130	
m-Xylene & p-Xylene	20.0	19.3	96	79-121	
n-Butylbenzene	20.0	17.5	88	54-129	
Isopropylbenzene	20.0	18.2	91	73-123	
n-Propylbenzene	20.0	18.5	93	67-130	
2-Butanone	40.0	43.3	108	41-151	
4-Methyl-2-pentanone	40.0	42.5	106	43-145	
sec-Butylbenzene	20.0	17.4	87	60-131	
Methyl tert-butyl ether	20.0	18.5	92	57-127	
Methylene Chloride	20.0	20.1	101	63-134	
o-Xylene	20.0	19.7	99	75-123	
Styrene	20.0	20.2	101	75-121	
tert-Butylbenzene	20.0	16.6	83	63-126	
Tetrachloroethene	20.0	16.0	80	70-125	
Toluene	20.0	20.1	101	79-122	
trans-1,2-Dichloroethene	20.0	18.7	94	74-130	
trans-1,3-Dichloropropene	20.0	19.4	97	64-120	
Trichloroethene	20.0	16.4	82	71-121	
Trichlorofluoromethane	20.0	17.5	87	52-148	
Vinyl acetate	20.0	20.8	104	44-160	
Vinyl chloride	20.0	22.2	111	61-134	
tert-Butyl alcohol	200	265	133	15-169	
Xylenes, Total	40.0	39.0	98	78-122	
Dibromochloromethane	20.0	18.9	95	75-120	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279809.D

Lab ID: LCS 240-447867/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.5	102	77-120	
1,1,1-Trichloroethane	20.0	19.8	99	65-141	
1,1,2,2-Tetrachloroethane	20.0	21.4	107	45-151	
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	21.7	108	54-148	
1,1-Dichloroethane	20.0	20.7	103	74-126	
1,1-Dichloroethene	20.0	21.1	105	73-129	
1,1-Dichloropropene	20.0	20.7	104	78-120	
1,2,3-Trichlorobenzene	20.0	23.0	115	42-126	
1,2,3-Trichloropropane	20.0	21.0	105	57-137	
1,2,4-Trichlorobenzene	20.0	22.7	113	47-120	
1,2,4-Trimethylbenzene	20.0	21.6	108	66-129	
1,2-Dibromo-3-Chloropropane	20.0	23.5	118	34-136	
1,2-Dichlorobenzene	20.0	20.4	102	74-120	
1,2-Dichloroethane	20.0	18.3	92	66-129	
1,2-Dichloropropane	20.0	21.5	107	79-127	
1,3-Dichlorobenzene	20.0	21.0	105	74-120	
1,3-Dichloropropane	20.0	20.5	102	74-122	
1,4-Dichlorobenzene	20.0	20.3	102	75-120	
2,2-Dichloropropane	20.0	19.4	97	67-137	
2-Chloroethyl vinyl ether	20.0	44.3	221	29-146	*
2-Chlorotoluene	20.0	21.2	106	73-126	
2-Hexanone	40.0	45.2	113	43-142	
Bromobenzene	20.0	21.0	105	77-120	
Bromochloromethane	20.0	18.4	92	70-128	
4-Chlorotoluene	20.0	21.0	105	73-126	
p-Isopropyltoluene	20.0	23.0	115	66-127	
Acetone	40.0	43.5	109	33-155	
Benzene	20.0	19.7	99	77-123	
Bromoform	20.0	21.4	107	47-133	
Bromomethane	20.0	18.4	92	48-144	
Carbon disulfide	20.0	21.6	108	67-127	
Carbon tetrachloride	20.0	20.0	100	61-142	
Chlorobenzene	20.0	20.7	104	80-120	
Chloroethane	20.0	19.1	96	41-147	
Chloroform	20.0	18.5	92	74-127	
Chloromethane	20.0	22.4	112	46-148	
cis-1,2-Dichloroethene	20.0	17.0	85	75-124	
cis-1,3-Dichloropropene	20.0	21.2	106	68-128	
Hexachlorobutadiene	20.0	22.1	110	40-120	
Dibromomethane	20.0	18.7	94	67-121	
Bromodichloromethane	20.0	20.0	100	73-122	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279809.D

Lab ID: LCS 240-447867/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	20.0	23.9	119	35-137	
Ethylbenzene	20.0	21.9	109	80-120	
1,2-Dibromoethane	20.0	20.1	101	73-120	
Naphthalene	20.0	24.0	120	28-130	
m-Xylene & p-Xylene	20.0	22.0	110	79-121	
n-Butylbenzene	20.0	23.1	116	54-129	
Isopropylbenzene	20.0	21.6	108	73-123	
n-Propylbenzene	20.0	23.1	116	67-130	
2-Butanone	40.0	40.6	102	41-151	
4-Methyl-2-pentanone	40.0	43.4	109	43-145	
sec-Butylbenzene	20.0	22.2	111	60-131	
Methyl tert-butyl ether	20.0	20.0	100	57-127	
Methylene Chloride	20.0	21.5	107	63-134	
o-Xylene	20.0	20.7	104	75-123	
Styrene	20.0	21.3	106	75-121	
tert-Butylbenzene	20.0	22.4	112	63-126	
Tetrachloroethene	20.0	20.3	101	70-125	
Toluene	20.0	20.2	101	79-122	
trans-1,2-Dichloroethene	20.0	21.9	109	74-130	
trans-1,3-Dichloropropene	20.0	21.1	106	64-120	
Trichloroethene	20.0	20.6	103	71-121	
Trichlorofluoromethane	20.0	19.1	96	52-148	
Vinyl acetate	20.0	18.5	93	44-160	
Vinyl chloride	20.0	21.9	109	61-134	
tert-Butyl alcohol	200	234	117	15-169	
Xylenes, Total	40.0	42.7	107	78-122	
Dibromochloromethane	20.0	20.1	100	75-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916401.d

Lab ID: 200-54623-C-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	20 U	407	102	67-120	
1,1,1-Trichloroethane	400	20 U	360	90	62-135	
1,1,2,2-Tetrachloroethane	400	20 U	490	122	37-149	
1,1,2-Trichlorotrifluoroethane (Freon 113)	400	20 U	406	102	41-145	
1,1-Dichloroethane	400	20 U	432	108	71-121	
1,1-Dichloroethene	400	20 U	393	98	64-132	
1,1-Dichloropropene	400	20 U	414	103	56-126	
1,2,3-Trichlorobenzene	400	20 U	348	87	32-122	
1,2,3-Trichloropropane	400	20 U	435	109	53-137	
1,2,4-Trichlorobenzene	400	20 U	309	77	37-120	
1,2,4-Trimethylbenzene	400	20 U	417	104	49-120	
1,2-Dibromo-3-Chloropropane	400	100 U	403	101	31-130	
1,2-Dichlorobenzene	400	20 U	410	103	65-120	
1,2-Dichloroethane	400	20 U	365	91	65-127	
1,2-Dichloropropane	400	20 U	423	106	73-125	
1,3-Dichlorobenzene	400	20 U	378	94	64-120	
1,3-Dichloropropane	400	20 U	450	112	65-125	
1,4-Dichlorobenzene	400	20 U	374	94	65-120	
2,2-Dichloropropane	400	20 U	437	109	42-137	
2-Chloroethyl vinyl ether	400	200 U	181 J	45	10-120	
2-Chlorotoluene	400	20 U	414	103	50-130	
2-Hexanone	800	100 U	932	116	44-142	
Bromobenzene	400	20 U	371	93	66-120	
Bromochloromethane	400	20 U	420	105	73-120	
4-Chlorotoluene	400	20 U	397	99	49-133	
p-Isopropyltoluene	400	20 U	384	96	39-133	
Acetone	800	100 U	1080	135	32-157	
Benzene	400	20 U	430	107	70-121	
Bromoform	400	20 U	363	91	41-128	
Bromomethane	400	20 U	385	96	41-136	
Carbon disulfide	400	20 U	396	99	54-131	
Carbon tetrachloride	400	20 U	351	88	53-142	
Chlorobenzene	400	20 U	411	103	73-120	
Chloroethane	400	20 U	436	109	37-142	
Chloroform	400	20 U	406	101	66-126	
Chloromethane	400	20 U	425	106	33-146	
cis-1,2-Dichloroethene	400	20 U	396	99	68-121	
cis-1,3-Dichloropropene	400	20 U	377	94	56-121	
Hexachlorobutadiene	400	20 U	260	65	17-120	
Dibromomethane	400	20 U	319	80	68-120	
Bromodichloromethane	400	20 U	367	92	69-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916401.d

Lab ID: 200-54623-C-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	400	20 U	352	88	27-132	
Ethylbenzene	400	20 U	407	102	66-122	
1,2-Dibromoethane	400	20 U	404	101	66-120	
Naphthalene	400	20 U	402	100	30-125	
m-Xylene & p-Xylene	400	40 U	417	104	65-123	
n-Butylbenzene	400	20 U	379	95	27-135	
Isopropylbenzene	400	20 U	412	103	56-122	
n-Propylbenzene	400	20 U	405	101	40-136	
2-Butanone	800	100 U	890	111	40-147	
4-Methyl-2-pentanone	800	100 U	866	108	40-147	
sec-Butylbenzene	400	20 U	392	98	32-139	
Methyl tert-butyl ether	400	20 U	375	94	50-126	
Methylene Chloride	400	100 U	414	104	59-127	
o-Xylene	400	20 U	430	108	63-124	
Styrene	400	20 U	418	104	57-126	
tert-Butylbenzene	400	20 U	369	92	36-133	
Tetrachloroethene	400	720	1080	90	52-129	
Toluene	400	20 U	439	110	68-124	
trans-1,2-Dichloroethene	400	20 U	412	103	69-126	
trans-1,3-Dichloropropene	400	20 U	390	98	53-120	
Trichloroethene	400	20 U	365	91	56-124	
Trichlorofluoromethane	400	20 U	351	88	45-152	
Vinyl acetate	400	40 U	435	109	28-165	
Vinyl chloride	400	10 U	438	110	49-136	
Xylenes, Total	800	40 U	847	106	64-124	
Dibromochloromethane	400	20 U	390	98	66-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279822a.D

Lab ID: 240-135021-B-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	130 U	2490	100	62-135	
1,1,2,2-Tetrachloroethane	2500	130 U	2720	109	37-149	
1,1-Dichloroethane	2500	130 U	2690	107	71-121	
1,1-Dichloroethene	2500	130 U	2710	108	64-132	
1,2-Dichlorobenzene	2500	130 U	2570	103	65-120	
1,2-Dichloroethane	2500	130 U	2310	92	65-127	
1,3-Dichlorobenzene	2500	130 U	2580	103	64-120	
1,4-Dichlorobenzene	2500	130 U	2500	100	65-120	
Acetone	5000	630 U	5600	112	32-157	
Benzene	2500	130 U	2440	98	70-121	
Carbon disulfide	2500	130 U	2700	108	54-131	
Chloroethane	2500	130 U	2470	99	37-142	
Chloroform	2500	130 U	2350	94	66-126	
cis-1,2-Dichloroethene	2500	2300	4410	84	68-121	
Ethylbenzene	2500	130 U	2680	107	66-122	
m-Xylene & p-Xylene	2500	250 U	2700	108	65-123	
Methylene Chloride	2500	630 U	2810	112	59-127	
o-Xylene	2500	130 U	2610	104	63-124	
Tetrachloroethene	2500	4300	6660	93	52-129	
Toluene	2500	130 U	2500	100	68-124	
trans-1,2-Dichloroethene	2500	130 U	2830	113	69-126	
Trichloroethene	2500	420	2910	99	56-124	
Vinyl chloride	2500	130	2950	113	49-136	
Xylenes, Total	5000	250 U	5310	106	64-124	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916402.d

Lab ID: 200-54623-C-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	405	101	1	35	67-120	
1,1,1-Trichloroethane	400	363	91	1	35	62-135	
1,1,2,2-Tetrachloroethane	400	485	121	1	35	37-149	
1,1,2-Trichlorotrifluoroethane (Freon 113)	400	389	97	4	35	41-145	
1,1-Dichloroethane	400	422	106	2	35	71-121	
1,1-Dichloroethene	400	381	95	3	35	64-132	
1,1-Dichloropropene	400	404	101	2	31	56-126	
1,2,3-Trichlorobenzene	400	359	90	3	24	32-122	
1,2,3-Trichloropropane	400	432	108	1	35	53-137	
1,2,4-Trichlorobenzene	400	322	80	4	25	37-120	
1,2,4-Trimethylbenzene	400	416	104	0	16	49-120	
1,2-Dibromo-3-Chloropropane	400	415	104	3	35	31-130	
1,2-Dichlorobenzene	400	410	103	0	35	65-120	
1,2-Dichloroethane	400	366	92	0	35	65-127	
1,2-Dichloropropane	400	430	107	2	35	73-125	
1,3-Dichlorobenzene	400	383	96	1	35	64-120	
1,3-Dichloropropane	400	443	111	2	10	65-125	
1,4-Dichlorobenzene	400	377	94	1	35	65-120	
2,2-Dichloropropane	400	444	111	1	28	42-137	
2-Chloroethyl vinyl ether	400	150 J	37	19	35	10-120	
2-Chlorotoluene	400	418	105	1	18	50-130	
2-Hexanone	800	957	120	3	35	44-142	
Bromobenzene	400	371	93	0	11	66-120	
Bromochloromethane	400	418	104	1	14	73-120	
4-Chlorotoluene	400	401	100	1	16	49-133	
p-Isopropyltoluene	400	385	96	0	22	39-133	
Acetone	800	1150	144	6	35	32-157	
Benzene	400	431	108	0	35	70-121	
Bromoform	400	351	88	3	35	41-128	
Bromomethane	400	380	95	1	35	41-136	
Carbon disulfide	400	388	97	2	35	54-131	
Carbon tetrachloride	400	354	88	1	35	53-142	
Chlorobenzene	400	404	101	2	35	73-120	
Chloroethane	400	424	106	3	35	37-142	
Chloroform	400	402	100	1	35	66-126	
Chloromethane	400	404	101	5	35	33-146	
cis-1,2-Dichloroethene	400	388	97	2	35	68-121	
cis-1,3-Dichloropropene	400	377	94	0	35	56-121	
Hexachlorobutadiene	400	271	68	4	35	17-120	
Dibromomethane	400	324	81	1	35	68-120	
Bromodichloromethane	400	370	92	1	35	69-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1916402.d

Lab ID: 200-54623-C-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	400	329	82	7	35	27-132	
Ethylbenzene	400	410	102	1	35	66-122	
1,2-Dibromoethane	400	399	100	1	35	66-120	
Naphthalene	400	412	103	3	24	30-125	
m-Xylene & p-Xylene	400	417	104	0	35	65-123	
n-Butylbenzene	400	387	97	2	24	27-135	
Isopropylbenzene	400	410	103	0	20	56-122	
n-Propylbenzene	400	409	102	1	18	40-136	
2-Butanone	800	968	121	8	35	40-147	
4-Methyl-2-pentanone	800	883	110	2	35	40-147	
sec-Butylbenzene	400	395	99	1	24	32-139	
Methyl tert-butyl ether	400	395	99	5	17	50-126	
Methylene Chloride	400	411	103	1	32	59-127	
o-Xylene	400	429	107	0	35	63-124	
Styrene	400	418	105	0	35	57-126	
tert-Butylbenzene	400	369	92	0	23	36-133	
Tetrachloroethene	400	1060	84	2	35	52-129	
Toluene	400	431	108	2	35	68-124	
trans-1,2-Dichloroethene	400	409	102	1	35	69-126	
trans-1,3-Dichloropropene	400	386	96	1	35	53-120	
Trichloroethene	400	363	91	0	35	56-124	
Trichlorofluoromethane	400	331	83	6	35	45-152	
Vinyl acetate	400	438	109	1	35	28-165	
Vinyl chloride	400	419	105	4	35	49-136	
Xylenes, Total	800	846	106	0	35	64-124	
Dibromochloromethane	400	386	97	1	35	66-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Matrix: Water Level: Low Lab File ID: U1279823a.D

Lab ID: 240-135021-B-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	2480	99	0	35	62-135	
1,1,2,2-Tetrachloroethane	2500	2660	106	2	35	37-149	
1,1-Dichloroethane	2500	2660	106	1	35	71-121	
1,1-Dichloroethene	2500	2720	109	0	35	64-132	
1,2-Dichlorobenzene	2500	2570	103	0	35	65-120	
1,2-Dichloroethane	2500	2310	92	0	35	65-127	
1,3-Dichlorobenzene	2500	2580	103	0	35	64-120	
1,4-Dichlorobenzene	2500	2490	100	0	35	65-120	
Acetone	5000	5840	117	4	35	32-157	
Benzene	2500	2460	98	1	35	70-121	
Carbon disulfide	2500	2700	108	0	35	54-131	
Chloroethane	2500	2450	98	1	35	37-142	
Chloroform	2500	2350	94	0	35	66-126	
cis-1,2-Dichloroethene	2500	4480	87	2	35	68-121	
Ethylbenzene	2500	2660	107	0	35	66-122	
m-Xylene & p-Xylene	2500	2720	109	1	35	65-123	
Methylene Chloride	2500	2790	112	1	32	59-127	
o-Xylene	2500	2620	105	0	35	63-124	
Tetrachloroethene	2500	6770	97	2	35	52-129	
Toluene	2500	2490	100	0	35	68-124	
trans-1,2-Dichloroethene	2500	2810	113	1	35	69-126	
Trichloroethene	2500	2970	102	2	35	56-124	
Vinyl chloride	2500	2890	111	2	35	49-136	
Xylenes, Total	5000	5340	107	1	35	64-124	

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1916365.d Lab Sample ID: MB 240-447281/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/14/2020 19:36

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 240-447281/5	U1916362.d	08/14/2020 18:29
MSA-SW42D-081220	240-134931-20	U1916375.d	08/14/2020 23:20
MSA-SW43A-081220	240-134931-21	U1916376.d	08/14/2020 23:42
MSA-SW43B-081220	240-134931-22	U1916377.d	08/15/2020 00:04
MSA-SW43C-081220	240-134931-23	U1916378.d	08/15/2020 00:27
MSA-SW43D-081220	240-134931-24	U1916379.d	08/15/2020 00:49
MSA-SW44A-081220	240-134931-25	U1916380.d	08/15/2020 01:12
MSA-SW44B-081220	240-134931-26	U1916381.d	08/15/2020 01:34
MSA-SW44C-081220	240-134931-27	U1916382.d	08/15/2020 01:57
MSA-SW44D-081220	240-134931-28	U1916383.d	08/15/2020 02:19
TB-081220	240-134931-29	U1916384.d	08/15/2020 02:41

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1916395.d Lab Sample ID: MB 240-447506/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/17/2020 19:16

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 240-447506/5	U1916392.d	08/17/2020 18:09
	200-54623-C-4 MS	U1916401.d	08/17/2020 21:29
	200-54623-C-4 MSD	U1916402.d	08/17/2020 21:52
MSA-SW37A-081220	240-134931-1	U1916404.d	08/17/2020 22:37
MSA-SW37B-081220	240-134931-2	U1916405.d	08/17/2020 22:59
MSA-SW37C-081220	240-134931-3	U1916406.d	08/17/2020 23:22
MSA-SW37D-081220	240-134931-4	U1916407.d	08/17/2020 23:44
MSA-SW38A-081220	240-134931-5	U1916408.d	08/18/2020 00:06
MSA-SW38B-081220	240-134931-6	U1916409.d	08/18/2020 00:29
MSA-SW38C-081220	240-134931-7	U1916410.d	08/18/2020 00:51
MSA-SW38D-081220	240-134931-8	U1916411.d	08/18/2020 01:14
MSA-SW40A-081220	240-134931-9	U1916412.d	08/18/2020 01:36
MSA-SW40B-081220	240-134931-10	U1916413.d	08/18/2020 01:59
MSA-SW42B-081220	240-134931-18	U1916414.d	08/18/2020 02:21
MSA-SW42C-081220	240-134931-19	U1916415.d	08/18/2020 02:44
MSA-SW46A-081220	240-134931-30	U1916416.d	08/18/2020 03:06
MSA-SW47A-081220	240-134931-31	U1916417.d	08/18/2020 03:28
MSA-SW48A-081220	240-134931-32	U1916418.d	08/18/2020 03:51
MSA-SW49A-081220	240-134931-33	U1916419.d	08/18/2020 04:13

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1916425.d Lab Sample ID: MB 240-447698/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX19 Date Analyzed: 08/18/2020 20:57

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 240-447698/5	U1916422.d	08/18/2020 19:50
MSA-SW37A-081220	240-134931-1	U1916426.d	08/18/2020 21:19
MSA-SW37B-081220	240-134931-2	U1916427.d	08/18/2020 21:42
MSA-SW37C-081220	240-134931-3	U1916428.d	08/18/2020 22:04
MSA-SW37D-081220	240-134931-4	U1916429.d	08/18/2020 22:27
MSA-SW38A-081220	240-134931-5	U1916430.d	08/18/2020 22:49
MSA-SW38B-081220	240-134931-6	U1916431.d	08/18/2020 23:12
MSA-SW38D-081220	240-134931-8	U1916432.d	08/18/2020 23:34
MSA-SW40A-081220	240-134931-9	U1916433.d	08/18/2020 23:56
MSA-SW40B-081220	240-134931-10	U1916434.d	08/19/2020 00:18
MSA-SW42B-081220	240-134931-18	U1916435.d	08/19/2020 00:41
MSA-SW42C-081220	240-134931-19	U1916436.d	08/19/2020 01:03
MSA-SW46A-081220	240-134931-30	U1916437.d	08/19/2020 01:26
MSA-SW47A-081220	240-134931-31	U1916438.d	08/19/2020 01:48
MSA-SW48A-081220	240-134931-32	U1916439.d	08/19/2020 02:10
MSA-SW49A-081220	240-134931-33	U1916440.d	08/19/2020 02:32
MSA-SW40C-081220	240-134931-11	U1916441.d	08/19/2020 02:55
MSA-SW40D-081220	240-134931-12	U1916442.d	08/19/2020 03:18
MSA-SW41A-081220	240-134931-13	U1916443.d	08/19/2020 03:40
MSA-SW41B-081220	240-134931-14	U1916444.d	08/19/2020 04:02
MSA-SW41C-081220	240-134931-15	U1916445.d	08/19/2020 04:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: U1279812.D Lab Sample ID: MB 240-447867/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX12 Date Analyzed: 08/19/2020 17:38

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 240-447867/5	U1279809.D	08/19/2020 16:31
	240-135021-B-1 MS	U1279822a.D	08/19/2020 21:22
	240-135021-B-1 MSD	U1279823a.D	08/19/2020 21:45
MSA-SW41D-081220	240-134931-16	U1279836.D	08/20/2020 02:37
MSA-SW42A-081220	240-134931-17	U1279837.D	08/20/2020 03:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: BFB4436a.D BFB Injection Date: 07/16/2020

Instrument ID: A3UX12 BFB Injection Time: 16:09

Analysis Batch No.: 442963

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	51.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	86.5	
175	5.0 - 9.0 % of mass 174	6.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	84.1	(97.2) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-442963/9	U1279113.D	07/16/2020	17:43
	STD8260 240-442963/10	U1279114.D	07/16/2020	18:05
	STD8260 240-442963/11	U1279115.D	07/16/2020	18:27
	STD8260 240-442963/12	U1279116.D	07/16/2020	18:50
	ICIS 240-442963/13	U1279117.D	07/16/2020	19:12
	STD8260 240-442963/14	U1279118.D	07/16/2020	19:35
	STD8260 240-442963/15	U1279119.D	07/16/2020	19:57
	STD8260 240-442963/16	U1279120.D	07/16/2020	20:20
	ICV 240-442963/17	U1279121.D	07/16/2020	20:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: BFB4462.D BFB Injection Date: 08/19/2020

Instrument ID: A3UX12 BFB Injection Time: 15:23

Analysis Batch No.: 447867

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.9	
75	30.0 - 60.0 % of mass 95	47.9	
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	Greater than 50% of mass 95	87.3	
175	5.0 - 9.0 % of mass 174	6.4	(7.3) 1
176	95.0 - 101.0 % of mass 174	85.5	(98.0) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-447867/3	U1279807.D	08/19/2020	15:46
	CCVIS 240-447867/4	U1279808.D	08/19/2020	16:09
	LCS 240-447867/5	U1279809.D	08/19/2020	16:31
	MB 240-447867/8	U1279812.D	08/19/2020	17:38
	240-135021-B-1 MS	U1279822a.D	08/19/2020	21:22
	240-135021-B-1 MSD	U1279823a.D	08/19/2020	21:45
MSA-SW41D-081220	240-134931-16	U1279836.D	08/20/2020	2:37
MSA-SW42A-081220	240-134931-17	U1279837.D	08/20/2020	3:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	Greater than 50% 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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: bfb599.d BFB Injection Date: 08/14/2020

Instrument ID: A3UX19 BFB Injection Time: 17:20

Analysis Batch No.: 447281

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.7	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	85.2	
175	5.0 - 9.0 % of mass 174	7.2	(8.5) 1
176	95.0 - 101.0 % of mass 174	82.6	(97.0) 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
	CCV 240-447281/3	U1916360.d	08/14/2020	17:44
	CCVIS 240-447281/4	U1916361.d	08/14/2020	18:06
	LCS 240-447281/5	U1916362.d	08/14/2020	18:29
	MB 240-447281/8	U1916365.d	08/14/2020	19:36
MSA-SW42D-081220	240-134931-20	U1916375.d	08/14/2020	23:20
MSA-SW43A-081220	240-134931-21	U1916376.d	08/14/2020	23:42
MSA-SW43B-081220	240-134931-22	U1916377.d	08/15/2020	0:04
MSA-SW43C-081220	240-134931-23	U1916378.d	08/15/2020	0:27
MSA-SW43D-081220	240-134931-24	U1916379.d	08/15/2020	0:49
MSA-SW44A-081220	240-134931-25	U1916380.d	08/15/2020	1:12
MSA-SW44B-081220	240-134931-26	U1916381.d	08/15/2020	1:34
MSA-SW44C-081220	240-134931-27	U1916382.d	08/15/2020	1:57
MSA-SW44D-081220	240-134931-28	U1916383.d	08/15/2020	2:19
TB-081220	240-134931-29	U1916384.d	08/15/2020	2:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: bfb600.d BFB Injection Date: 08/17/2020

Instrument ID: A3UX19 BFB Injection Time: 17:02

Analysis Batch No.: 447506

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	47.8	
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	Greater than 50% of mass 95	85.2	
175	5.0 - 9.0 % of mass 174	7.3	(8.6) 1
176	95.0 - 101.0 % of mass 174	81.9	(96.1) 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
	CCV 240-447506/3	U1916390.d	08/17/2020	17:24
	CCVIS 240-447506/4	U1916391.d	08/17/2020	17:46
	LCS 240-447506/5	U1916392.d	08/17/2020	18:09
	MB 240-447506/8	U1916395.d	08/17/2020	19:16
	200-54623-C-4 MS	U1916401.d	08/17/2020	21:29
	200-54623-C-4 MSD	U1916402.d	08/17/2020	21:52
MSA-SW37A-081220	240-134931-1	U1916404.d	08/17/2020	22:37
MSA-SW37B-081220	240-134931-2	U1916405.d	08/17/2020	22:59
MSA-SW37C-081220	240-134931-3	U1916406.d	08/17/2020	23:22
MSA-SW37D-081220	240-134931-4	U1916407.d	08/17/2020	23:44
MSA-SW38A-081220	240-134931-5	U1916408.d	08/18/2020	0:06
MSA-SW38B-081220	240-134931-6	U1916409.d	08/18/2020	0:29
MSA-SW38C-081220	240-134931-7	U1916410.d	08/18/2020	0:51
MSA-SW38D-081220	240-134931-8	U1916411.d	08/18/2020	1:14
MSA-SW40A-081220	240-134931-9	U1916412.d	08/18/2020	1:36
MSA-SW40B-081220	240-134931-10	U1916413.d	08/18/2020	1:59
MSA-SW42B-081220	240-134931-18	U1916414.d	08/18/2020	2:21
MSA-SW42C-081220	240-134931-19	U1916415.d	08/18/2020	2:44
MSA-SW46A-081220	240-134931-30	U1916416.d	08/18/2020	3:06
MSA-SW47A-081220	240-134931-31	U1916417.d	08/18/2020	3:28
MSA-SW48A-081220	240-134931-32	U1916418.d	08/18/2020	3:51
MSA-SW49A-081220	240-134931-33	U1916419.d	08/18/2020	4:13

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab File ID: bfb601.d BFB Injection Date: 08/18/2020

Instrument ID: A3UX19 BFB Injection Time: 18:41

Analysis Batch No.: 447698

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	48.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	84.7	
175	5.0 - 9.0 % of mass 174	7.0	(8.3) 1
176	95.0 - 101.0 % of mass 174	81.4	(96.1) 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
	CCV 240-447698/3	U1916420.d	08/18/2020	19:05
	CCVIS 240-447698/4	U1916421.d	08/18/2020	19:27
	LCS 240-447698/5	U1916422.d	08/18/2020	19:50
	MB 240-447698/8	U1916425.d	08/18/2020	20:57
MSA-SW37A-081220	240-134931-1	U1916426.d	08/18/2020	21:19
MSA-SW37B-081220	240-134931-2	U1916427.d	08/18/2020	21:42
MSA-SW37C-081220	240-134931-3	U1916428.d	08/18/2020	22:04
MSA-SW37D-081220	240-134931-4	U1916429.d	08/18/2020	22:27
MSA-SW38A-081220	240-134931-5	U1916430.d	08/18/2020	22:49
MSA-SW38B-081220	240-134931-6	U1916431.d	08/18/2020	23:12
MSA-SW38D-081220	240-134931-8	U1916432.d	08/18/2020	23:34
MSA-SW40A-081220	240-134931-9	U1916433.d	08/18/2020	23:56
MSA-SW40B-081220	240-134931-10	U1916434.d	08/19/2020	0:18
MSA-SW42B-081220	240-134931-18	U1916435.d	08/19/2020	0:41
MSA-SW42C-081220	240-134931-19	U1916436.d	08/19/2020	1:03
MSA-SW46A-081220	240-134931-30	U1916437.d	08/19/2020	1:26
MSA-SW47A-081220	240-134931-31	U1916438.d	08/19/2020	1:48
MSA-SW48A-081220	240-134931-32	U1916439.d	08/19/2020	2:10
MSA-SW49A-081220	240-134931-33	U1916440.d	08/19/2020	2:32
MSA-SW40C-081220	240-134931-11	U1916441.d	08/19/2020	2:55
MSA-SW40D-081220	240-134931-12	U1916442.d	08/19/2020	3:18
MSA-SW41A-081220	240-134931-13	U1916443.d	08/19/2020	3:40
MSA-SW41B-081220	240-134931-14	U1916444.d	08/19/2020	4:02
MSA-SW41C-081220	240-134931-15	U1916445.d	08/19/2020	4:24

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: ICIS 240-442963/13 Date Analyzed: 07/16/2020 19:12

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1279117.D Heated Purge: (Y/N) N

Calibration ID: 57831

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		930091	5.10	747849	7.75	400649	9.97
UPPER LIMIT		1860182	5.60	1495698	8.25	801298	10.47
LOWER LIMIT		465046	4.60	373925	7.25	200325	9.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-442963/17		993337	5.10	838058	7.75	407737	9.97
CCVIS 240-447867/4		1010042	5.10	700125	7.75	361557	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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447867/4 Date Analyzed: 08/19/2020 16:09

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1279808.D Heated Purge: (Y/N) N

Calibration ID: 57831

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1010042	5.10	700125	7.75	361557	9.97
UPPER LIMIT		2020084	5.60	1400250	8.25	723114	10.47
LOWER LIMIT		505021	4.60	350063	7.25	180779	9.47
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447867/5		997670	5.10	699753	7.75	354239	9.97
MB 240-447867/8		1000312	5.10	688248	7.75	355736	9.97
240-135021-B-1 MS		941545	5.10	635001	7.75	323387	9.97
240-135021-B-1 MSD		949078	5.10	642472	7.75	333892	9.97
240-134931-16	MSA-SW41D-081220	932458	5.10	626218	7.75	323122	9.97
240-134931-17	MSA-SW42A-081220	952910	5.10	623276	7.76	330885	9.97

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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 240-447281/4		1022055	5.67	752909	8.50	402555	10.90
CCVIS 240-447506/4		967141	5.67	690161	8.50	372753	10.90
CCVIS 240-447698/4		954186	5.67	706054	8.50	382688	10.90

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447281/4 Date Analyzed: 08/14/2020 18:06

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1916361.d Heated Purge: (Y/N) N

Calibration ID: 57283

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1022055	5.67	752909	8.50	402555	10.90
UPPER LIMIT		2044110	6.17	1505818	9.00	805110	11.40
LOWER LIMIT		511028	5.17	376455	8.00	201278	10.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447281/5		1014792	5.67	743246	8.50	391665	10.90
MB 240-447281/8		958064	5.67	707631	8.50	352282	10.90
240-134931-20	MSA-SW42D-081220	933963	5.67	703049	8.50	350679	10.90
240-134931-21	MSA-SW43A-081220	925817	5.67	677265	8.50	342636	10.90
240-134931-22	MSA-SW43B-081220	934195	5.67	695083	8.50	352618	10.90
240-134931-23	MSA-SW43C-081220	920030	5.67	664768	8.50	343360	10.90
240-134931-24	MSA-SW43D-081220	912701	5.67	677859	8.50	338931	10.90
240-134931-25	MSA-SW44A-081220	927781	5.67	687470	8.50	344875	10.90
240-134931-26	MSA-SW44B-081220	903726	5.67	663614	8.50	330950	10.90
240-134931-27	MSA-SW44C-081220	905539	5.67	673435	8.50	336744	10.90
240-134931-28	MSA-SW44D-081220	909064	5.67	673033	8.50	338369	10.90
240-134931-29	TB-081220	906404	5.67	669847	8.50	335696	10.90

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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447506/4 Date Analyzed: 08/17/2020 17:46

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1916391.d Heated Purge: (Y/N) N

Calibration ID: 57283

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		967141	5.67	690161	8.50	372753	10.90
UPPER LIMIT		1934282	6.17	1380322	9.00	745506	11.40
LOWER LIMIT		483571	5.17	345081	8.00	186377	10.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447506/5		999090	5.67	731543	8.50	400514	10.90
MB 240-447506/8		945687	5.67	683222	8.50	346340	10.90
200-54623-C-4 MS		974131	5.67	702529	8.51	383576	10.90
200-54623-C-4 MSD		992250	5.67	726145	8.50	395313	10.90
240-134931-1	MSA-SW37A-081220	936520	5.67	693217	8.50	345992	10.90
240-134931-2	MSA-SW37B-081220	928693	5.67	694943	8.50	350260	10.90
240-134931-3	MSA-SW37C-081220	904322	5.67	667640	8.50	337245	10.90
240-134931-4	MSA-SW37D-081220	923313	5.67	686951	8.50	342196	10.90
240-134931-5	MSA-SW38A-081220	910188	5.67	665339	8.50	327616	10.90
240-134931-6	MSA-SW38B-081220	913681	5.67	684880	8.50	338002	10.90
240-134931-7	MSA-SW38C-081220	888598	5.67	659768	8.50	331894	10.90
240-134931-8	MSA-SW38D-081220	904030	5.67	670180	8.50	337312	10.90
240-134931-9	MSA-SW40A-081220	905265	5.67	679888	8.50	343518	10.90
240-134931-10	MSA-SW40B-081220	901695	5.67	663538	8.50	337329	10.90
240-134931-18	MSA-SW42B-081220	901991	5.67	680306	8.50	338031	10.90
240-134931-19	MSA-SW42C-081220	896727	5.67	675389	8.50	342413	10.90
240-134931-30	MSA-SW46A-081220	883786	5.67	652781	8.50	320354	10.90
240-134931-31	MSA-SW47A-081220	880192	5.67	661616	8.50	329024	10.90
240-134931-32	MSA-SW48A-081220	892592	5.67	663509	8.50	335965	10.90
240-134931-33	MSA-SW49A-081220	864276	5.67	634213	8.50	315957	10.90

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Sample No.: CCVIS 240-447698/4 Date Analyzed: 08/18/2020 19:27

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): U1916421.d Heated Purge: (Y/N) N

Calibration ID: 57283

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		954186	5.67	706054	8.50	382688	10.90
UPPER LIMIT		1908372	6.17	1412108	9.00	765376	11.40
LOWER LIMIT		477093	5.17	353027	8.00	191344	10.40
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-447698/5		977757	5.67	723764	8.50	393016	10.90
MB 240-447698/8		912538	5.67	657246	8.50	332725	10.90
240-134931-1	MSA-SW37A-081220	910478	5.67	680903	8.50	331876	10.90
240-134931-2	MSA-SW37B-081220	879393	5.67	636420	8.50	312110	10.90
240-134931-3	MSA-SW37C-081220	899895	5.67	671807	8.50	335308	10.90
240-134931-4	MSA-SW37D-081220	906114	5.67	676535	8.50	335707	10.90
240-134931-5	MSA-SW38A-081220	897663	5.67	658154	8.50	332914	10.90
240-134931-6	MSA-SW38B-081220	896010	5.67	668841	8.50	331560	10.90
240-134931-8	MSA-SW38D-081220	889995	5.67	659102	8.50	323793	10.90
240-134931-9	MSA-SW40A-081220	898504	5.67	667755	8.50	330744	10.90
240-134931-10	MSA-SW40B-081220	870199	5.67	640076	8.50	321111	10.90
240-134931-18	MSA-SW42B-081220	879575	5.67	649592	8.50	318342	10.90
240-134931-19	MSA-SW42C-081220	874876	5.67	632191	8.50	312526	10.90
240-134931-30	MSA-SW46A-081220	892915	5.67	669729	8.50	338552	10.90
240-134931-31	MSA-SW47A-081220	859457	5.67	636547	8.50	317151	10.90
240-134931-32	MSA-SW48A-081220	879171	5.67	664869	8.50	324656	10.90
240-134931-33	MSA-SW49A-081220	875258	5.67	633097	8.50	310423	10.90
240-134931-11	MSA-SW40C-081220	884983	5.67	657806	8.50	328137	10.90
240-134931-12	MSA-SW40D-081220	901237	5.67	680557	8.50	343999	10.90
240-134931-13	MSA-SW41A-081220	877451	5.67	650000	8.51	315627	10.90
240-134931-14	MSA-SW41B-081220	887179	5.67	664563	8.50	326648	10.90
240-134931-15	MSA-SW41C-081220	871203	5.67	663260	8.50	323077	10.90

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	102		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916404.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:37

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916404.d
Lims ID: 240-134931-A-1
Client ID: MSA-SW37A-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 22:37:14 ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-017
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:45:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	936520	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	693217	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	345992	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	94	256114	20.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	287692	19.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	858209	20.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	288964	18.5	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	51760	14.1	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.579	3.590	-0.011	20	508	0.4006	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	99	2965	1.34	
41 cis-1,2-Dichloroethene	96		4.634				ND	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	96	3389	0.2290	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180	13.030	13.018	0.012	84	1766	0.1194	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	84	1150	0.1514	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

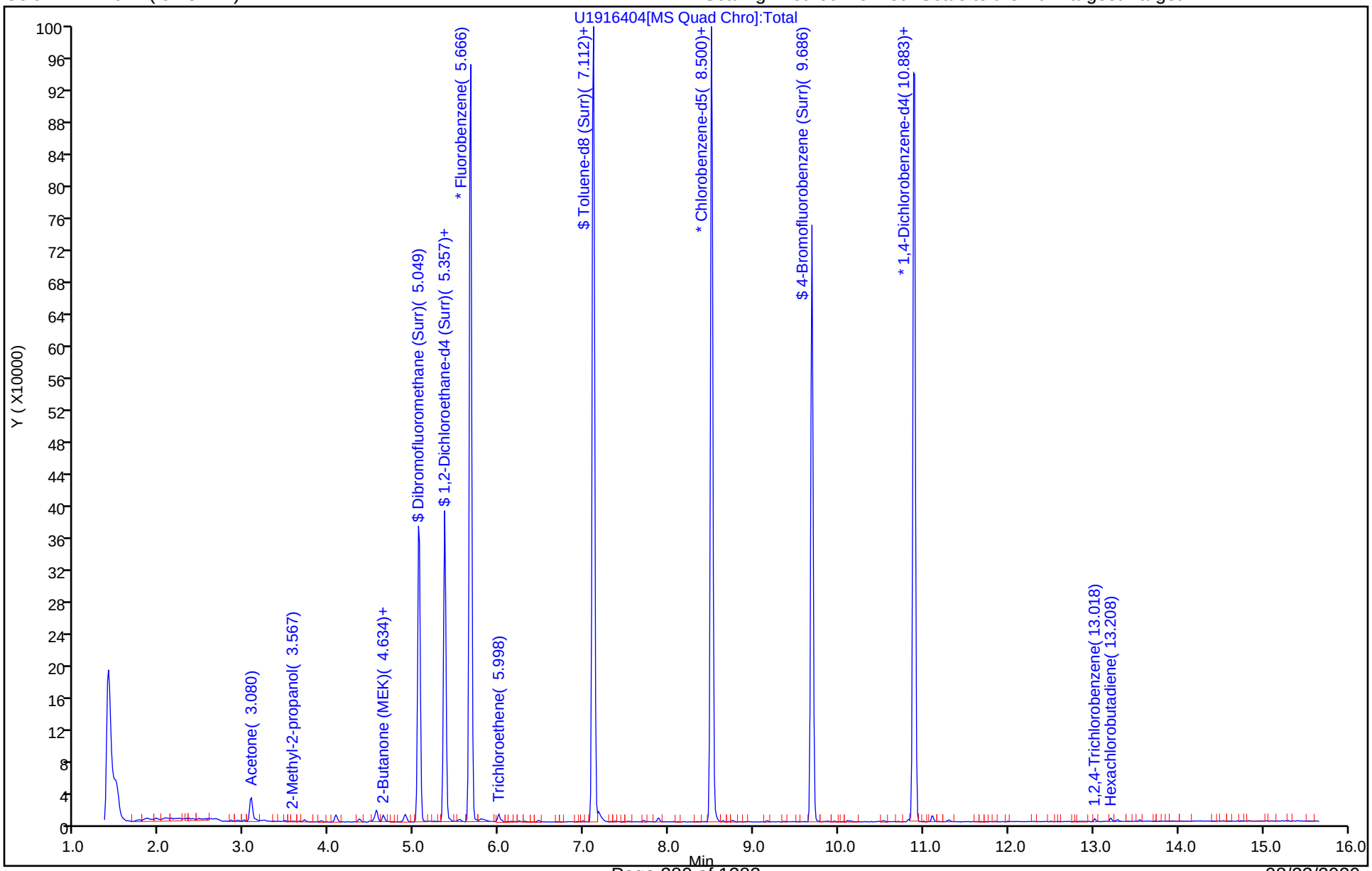
Report Date: 18-Aug-2020 14:45:23 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916404.d

Injection Date:	17-Aug-2020 22:37:14	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-1	Lab Sample ID:	240-134931-1	Worklist Smp#:	17
Client ID:	MSA-SW37A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916404.d
Lims ID: 240-134931-A-1
Client ID: MSA-SW37A-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 22:37:14 ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-017
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:45:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.3	101.59
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.9	99.35
$ 6 Toluene-d8 (Surr)	20.0	20.6	103.23
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.37

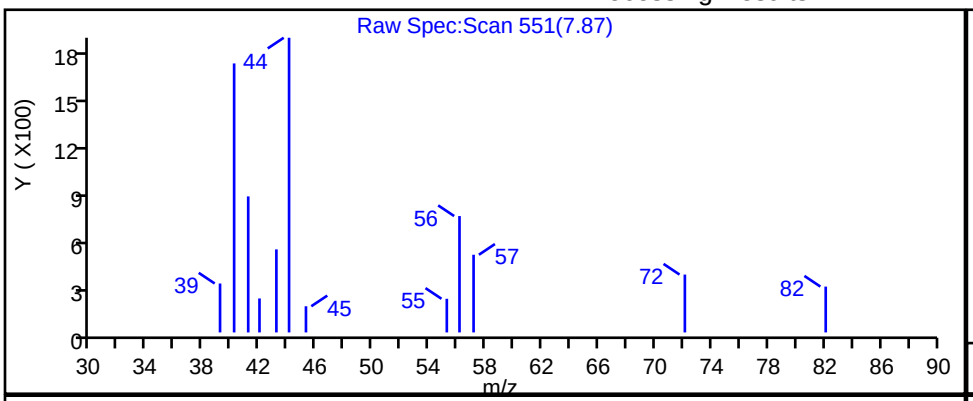
User Disabled Compound Report

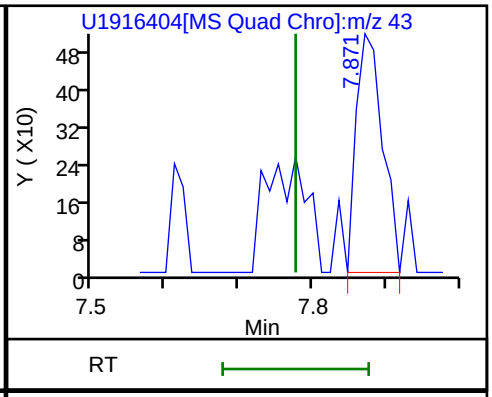
Eurofins TestAmerica, Canton

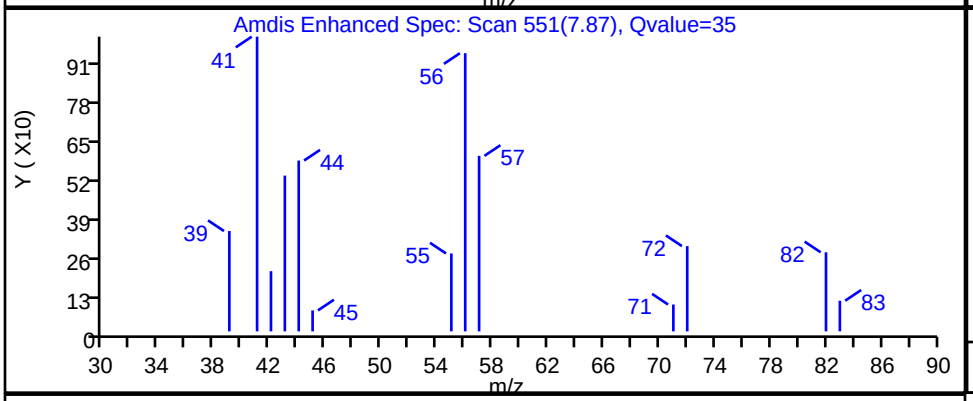
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916404.d		
Injection Date:	17-Aug-2020 22:37:14	Instrument ID:	A3UX19
Lims ID:	240-134931-A-1	Lab Sample ID:	240-134931-1
Client ID:	MSA-SW37A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

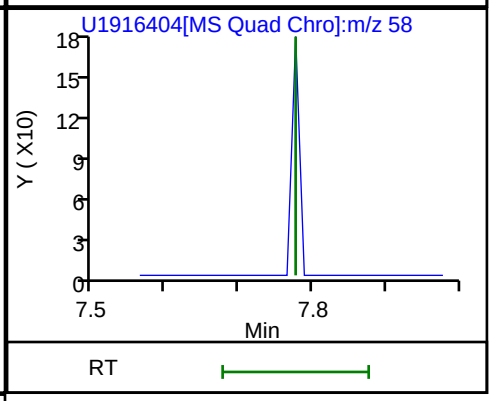
77 2-Hexanone, CAS: 591-78-6

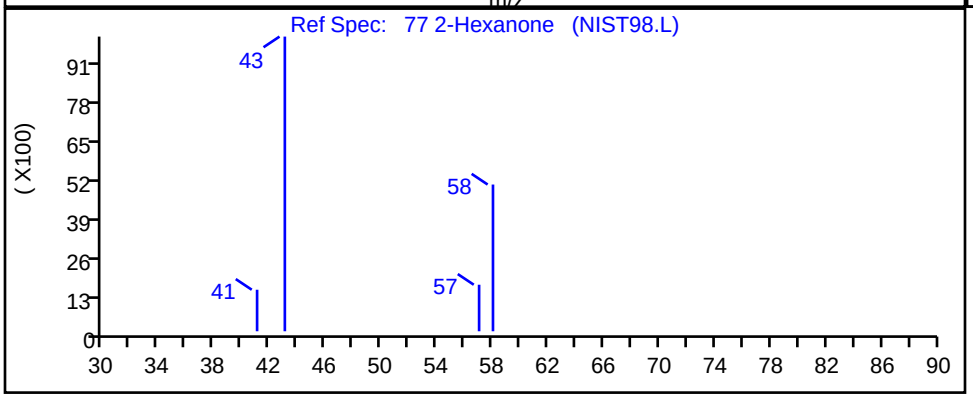
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1279	0.117185
7.78	58.00	0	

Reviewer: laveyt, 18-Aug-2020 14:45:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916426.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	17		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37A-081220 Lab Sample ID: 240-134931-1

Matrix: Water Lab File ID: U1916426.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:18

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916426.d
Lims ID: 240-134931-B-1
Client ID: MSA-SW37A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 21:19:46 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-009
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 21:40:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 21:40:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	910478	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	680903	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	331876	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	259421	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	293864	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	857722	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	286947	18.7	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	58994	16.5	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	50	820	0.6651	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	99	3512	1.63	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	94	3282	0.2281	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

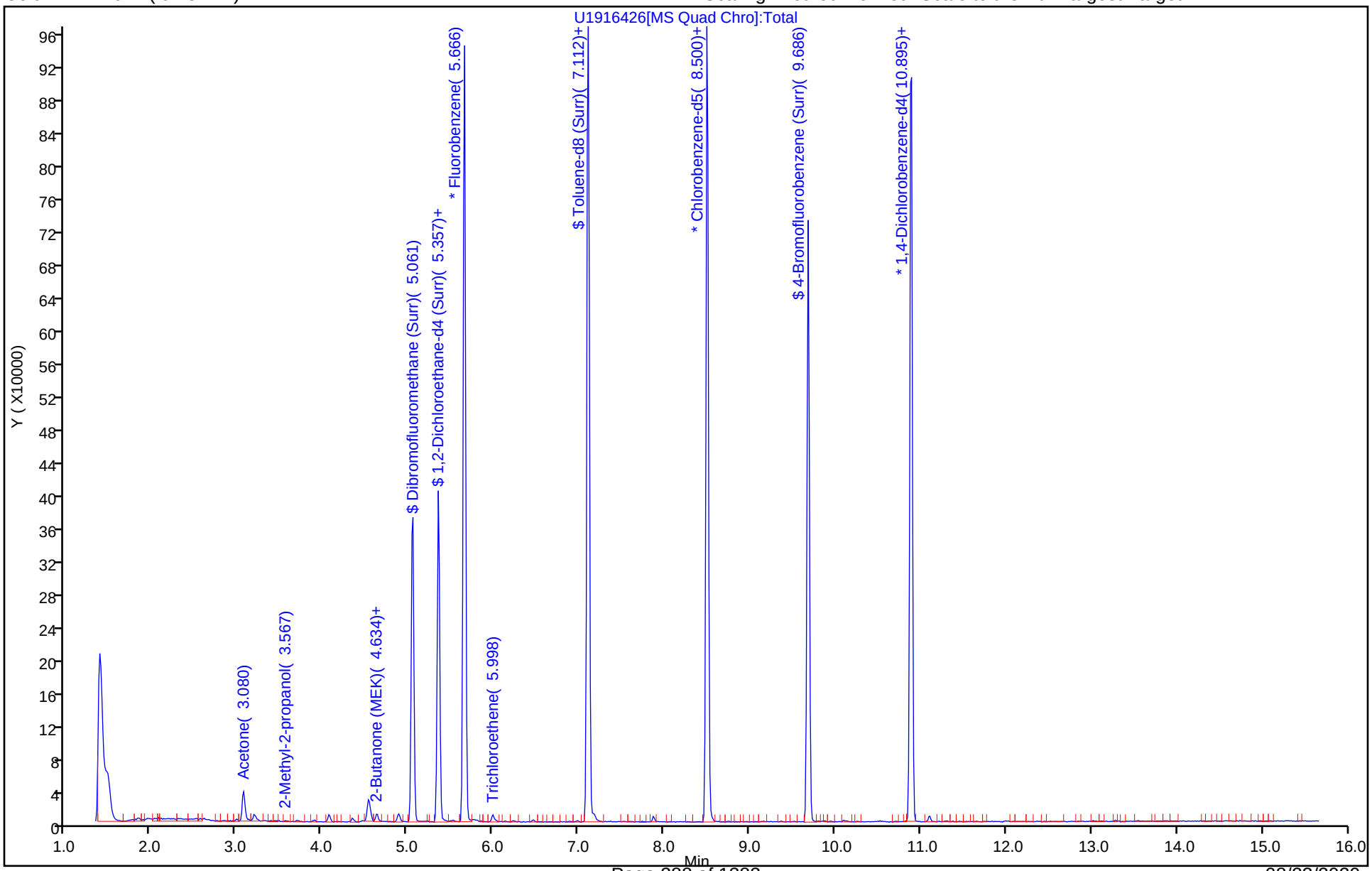
Report Date: 18-Aug-2020 21:40:04 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916426.d

Injection Date:	18-Aug-2020 21:19:46	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-1	Lab Sample ID:	240-134931-1	Worklist Smp#:	9
Client ID:	MSA-SW37A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916426.d
Lims ID: 240-134931-B-1
Client ID: MSA-SW37A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 21:19:46 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-009
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 21:40:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 21:40:03

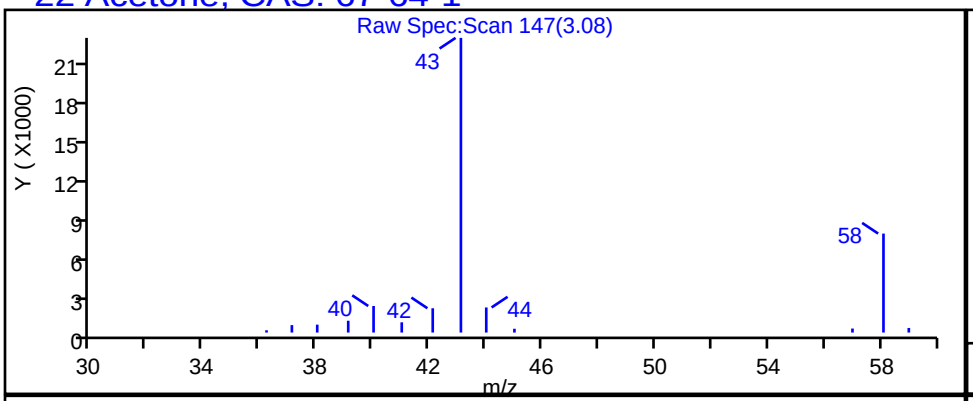
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	105.84
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.39
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.04
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.38

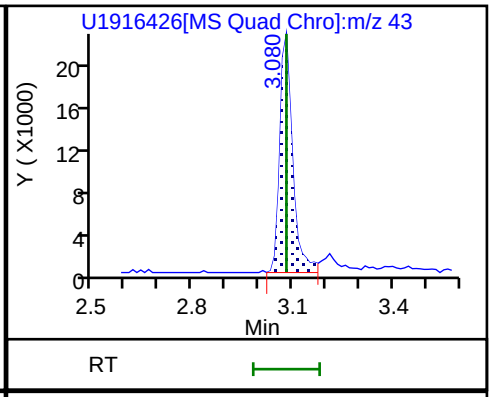
Eurofins TestAmerica, Canton

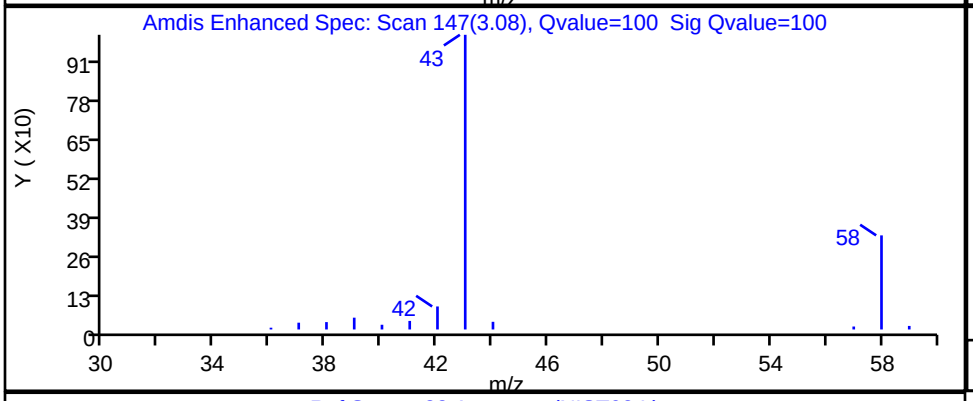
Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916426.d

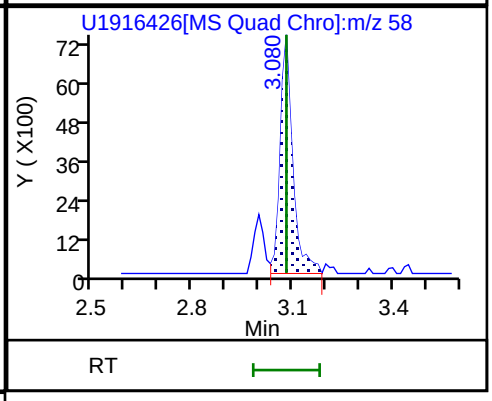
Injection Date:	18-Aug-2020 21:19:46	Instrument ID:	A3UX19
Lims ID:	240-134931-B-1	Lab Sample ID:	240-134931-1
Client ID:	MSA-SW37A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

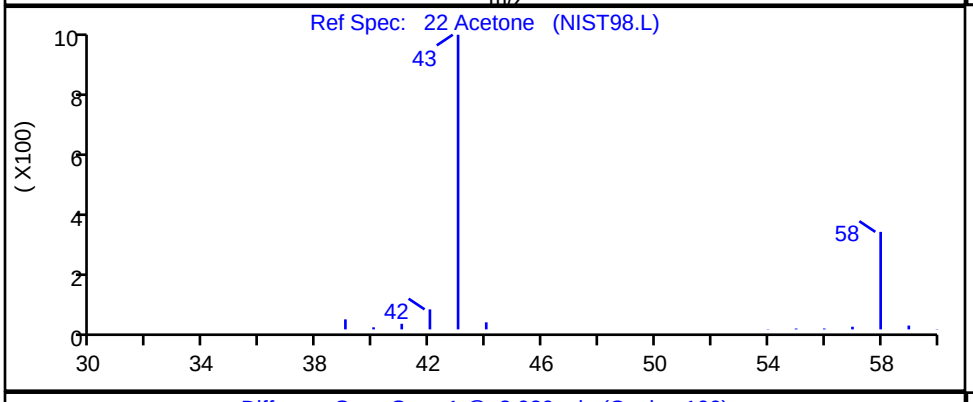
22 Acetone, CAS: 67-64-1

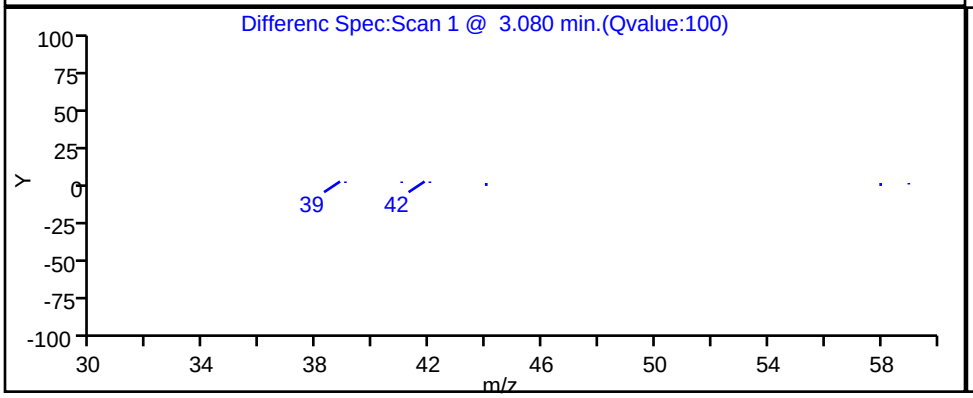


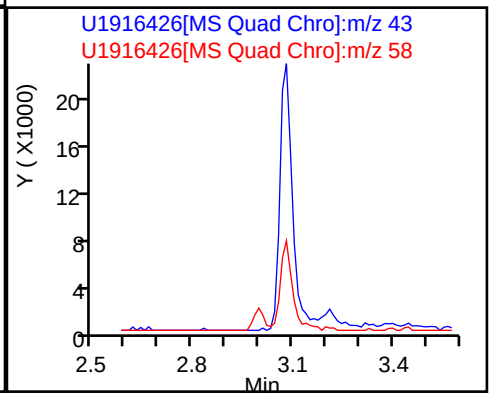












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916405.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 22:59

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916405.d
Lims ID: 240-134931-B-2
Client ID: MSA-SW37B-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 22:59:50 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-018
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:45:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	928693	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	87	694943	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	350260	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	264573	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	299131	20.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	891393	21.4	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	294809	18.8	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	93	1820	0.1315	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	22344	6.14	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.590	-0.012	26	413	0.3284	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	96	1414	0.6448	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	72	2268	0.1690	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	93	1595	0.1087	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

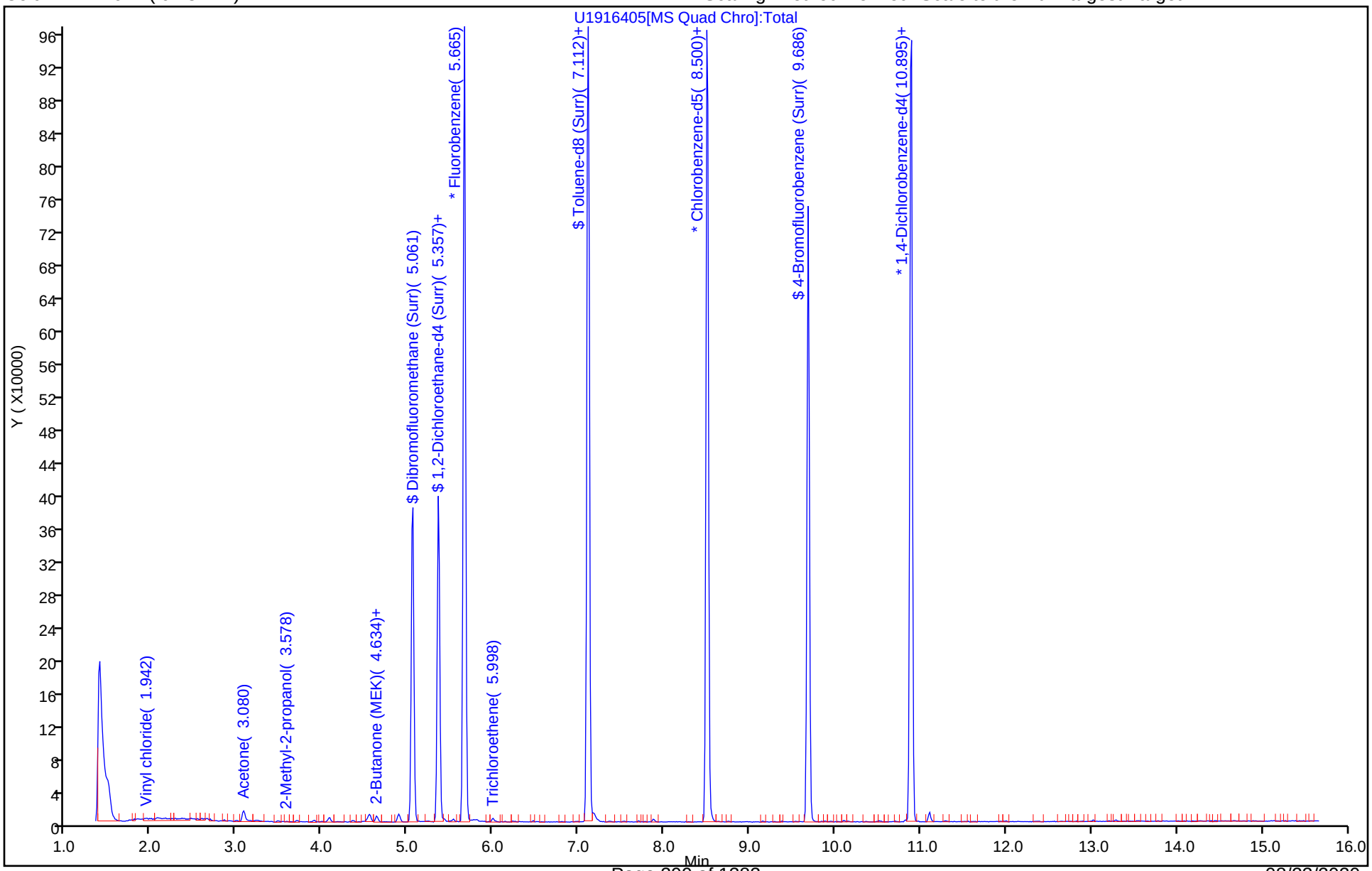
Report Date: 18-Aug-2020 14:45:45 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916405.d

Injection Date:	17-Aug-2020 22:59:50	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-2	Lab Sample ID:	240-134931-2	Worklist Smp#:	18
Client ID:	MSA-SW37B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916405.d
Lims ID: 240-134931-B-2
Client ID: MSA-SW37B-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 22:59:50 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-018
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:45:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	105.83
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	104.17
$ 6 Toluene-d8 (Surr)	20.0	21.4	106.95
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.8	94.00

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916427.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.7		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37B-081220 Lab Sample ID: 240-134931-2

Matrix: Water Lab File ID: U1916427.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:21

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 21:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916427.d
Lims ID: 240-134931-A-2
Client ID: MSA-SW37B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 21:42:13 ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-010
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:59:57 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 22:08:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	879393	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	636420	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	312110	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	252855	21.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	282995	20.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	827856	21.7	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	273996	19.1	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	91	1778	0.1357	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.092	3.080	0.012	99	23132	6.71	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.578				ND	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	65	1740	0.1369	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1234	0.5943	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

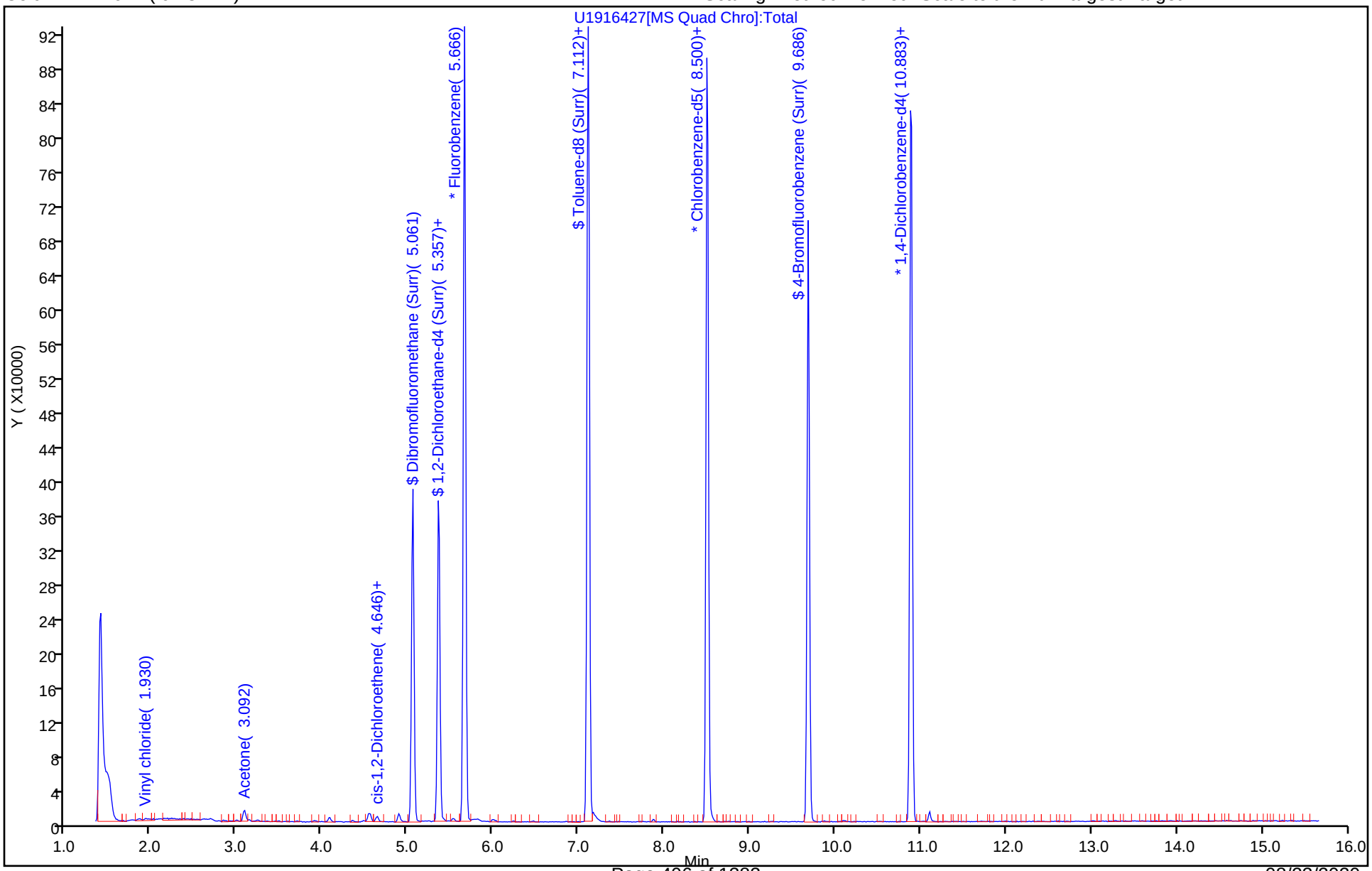
Report Date: 18-Aug-2020 22:08:27 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916427.d

Injection Date:	18-Aug-2020 21:42:13	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-2	Lab Sample ID:	240-134931-2	Worklist Smp#:	10
Client ID:	MSA-SW37B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916427.d
Lims ID: 240-134931-A-2
Client ID: MSA-SW37B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 21:42:13 ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-010
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:59:57 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

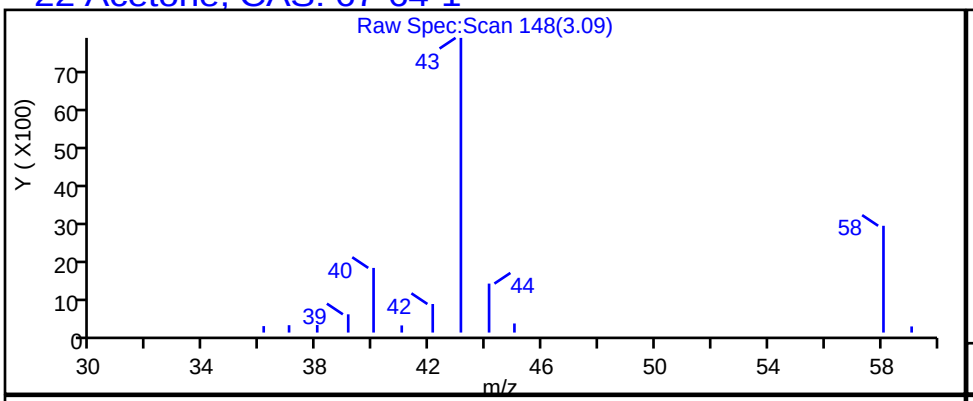
First Level Reviewer: laveyt Date: 18-Aug-2020 22:08:26

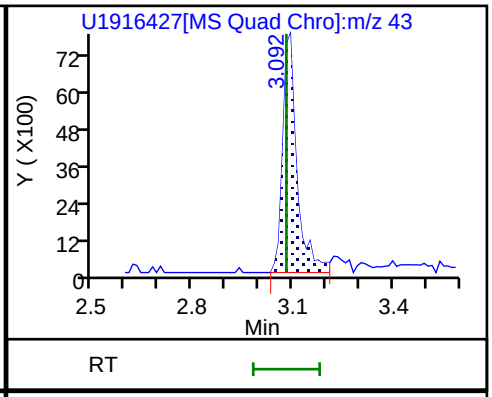
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.4	106.81
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	104.08
$ 6 Toluene-d8 (Surr)	20.0	21.7	108.47
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.1	95.40

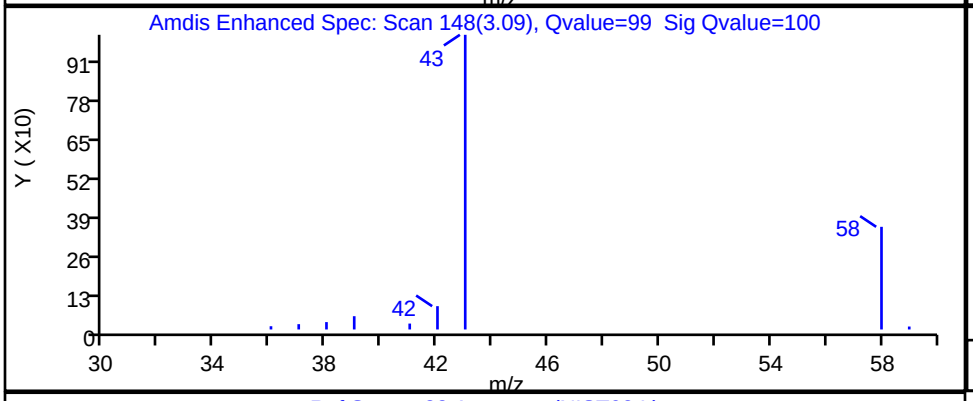
Eurofins TestAmerica, Canton

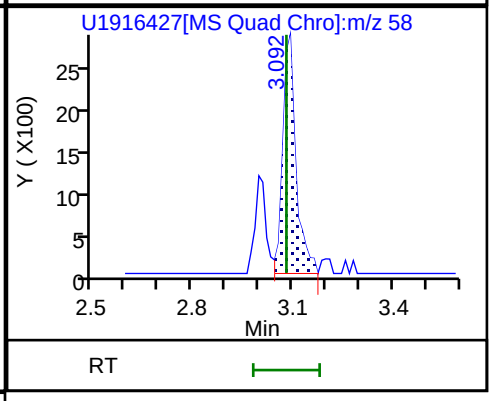
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916427.d		
Injection Date:	18-Aug-2020 21:42:13	Instrument ID:	A3UX19
Lims ID:	240-134931-A-2	Lab Sample ID:	240-134931-2
Client ID:	MSA-SW37B-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

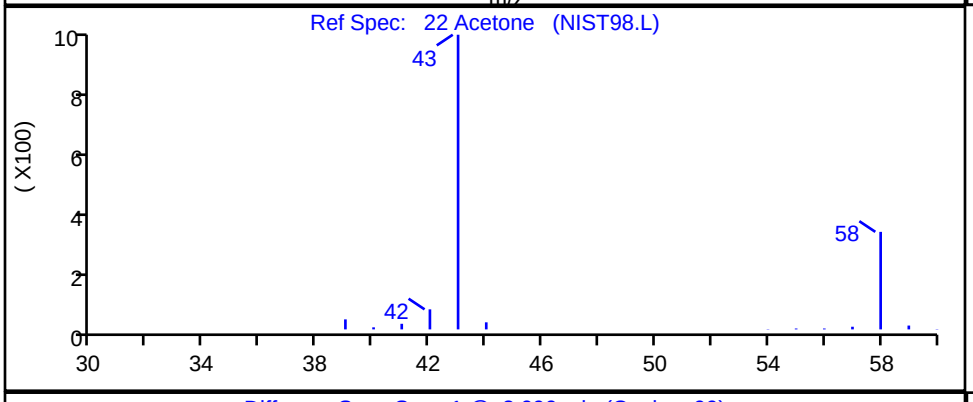
22 Acetone, CAS: 67-64-1

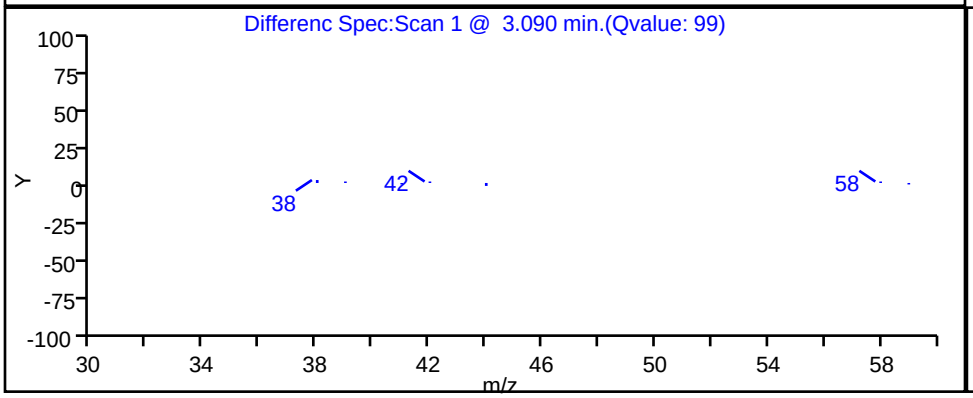


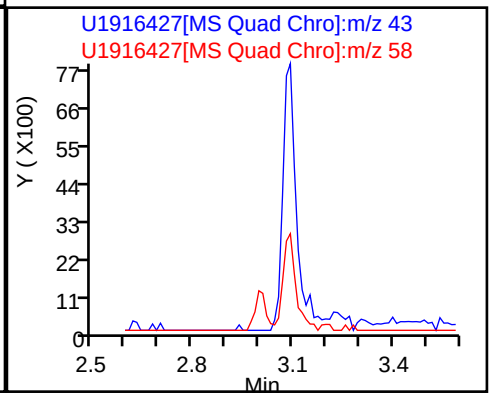












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.61		0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	97		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916406.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:22

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916406.d
Lims ID: 240-134931-B-3
Client ID: MSA-SW37C-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 23:22:17 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-019
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:46:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	904322	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	667640	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	337245	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	260421	21.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	296184	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	848303	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	291571	19.4	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	95	8197	0.6084	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	98	19466	5.49	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.590				ND	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	60	857	0.4013	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	75	4791	0.3666	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	84	1474	0.1032	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

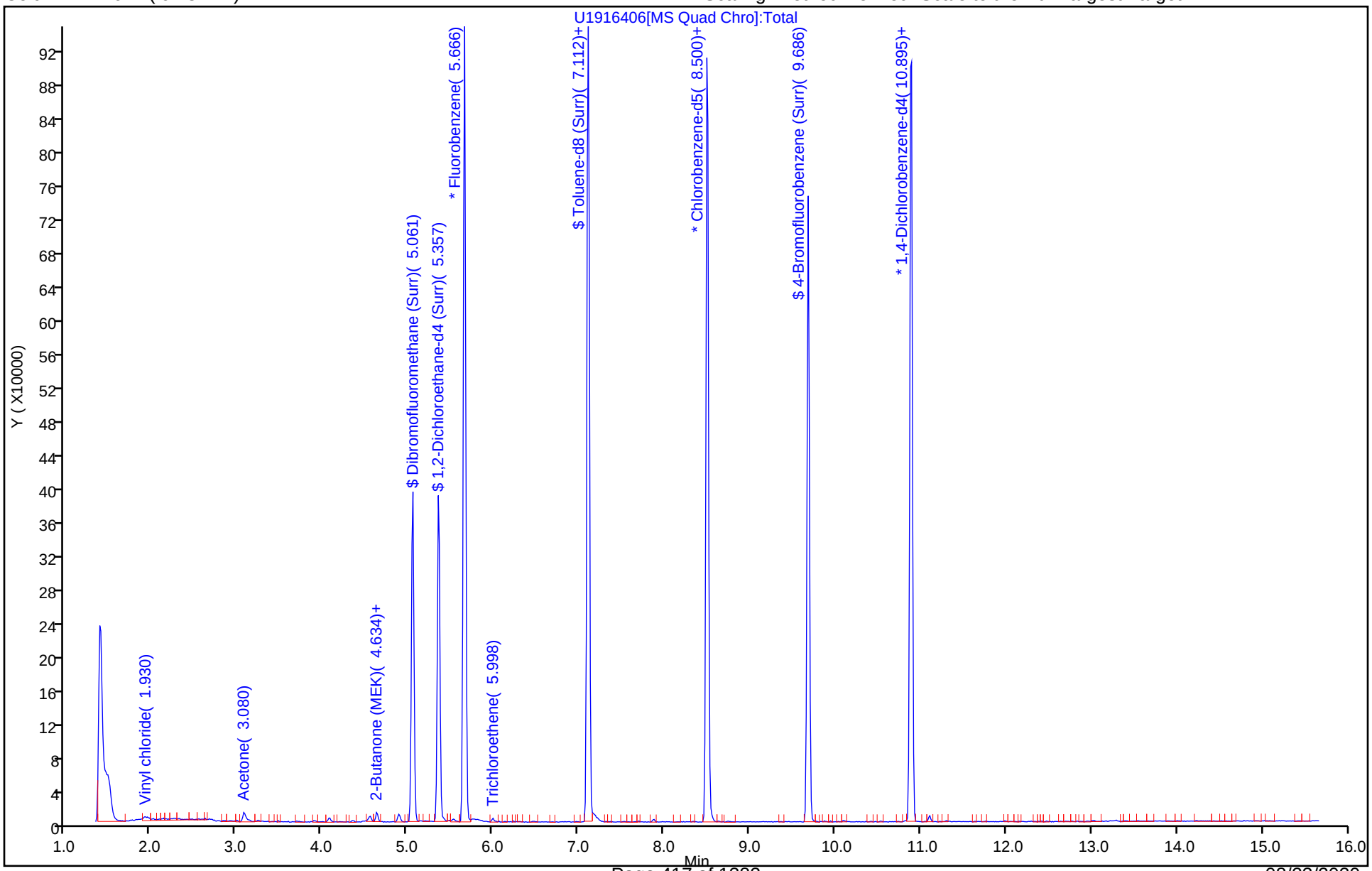
Report Date: 18-Aug-2020 14:46:15 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916406.d

Injection Date:	17-Aug-2020 23:22:17	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-3	Lab Sample ID:	240-134931-3	Worklist Smp#:	19
Client ID:	MSA-SW37C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916406.d
Lims ID: 240-134931-B-3
Client ID: MSA-SW37C-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 23:22:17 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-019
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:46:15

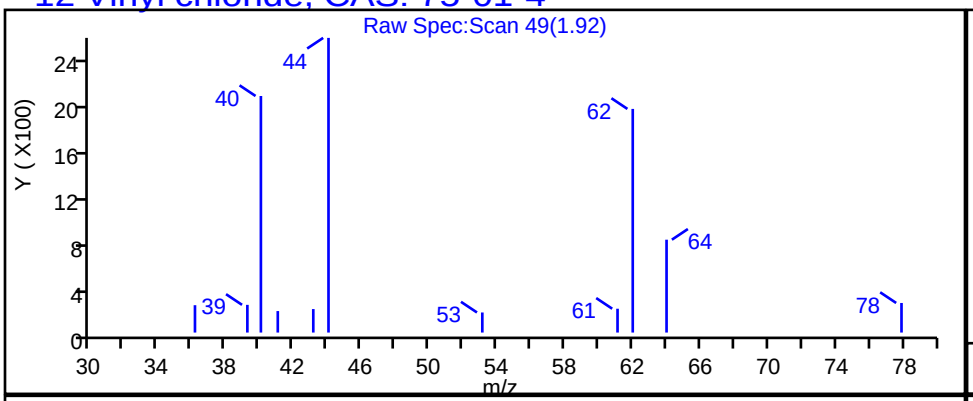
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.4	106.97
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	105.93
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.95
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.4	96.77

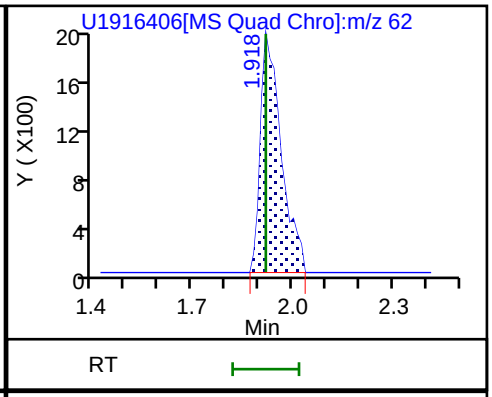
Eurofins TestAmerica, Canton

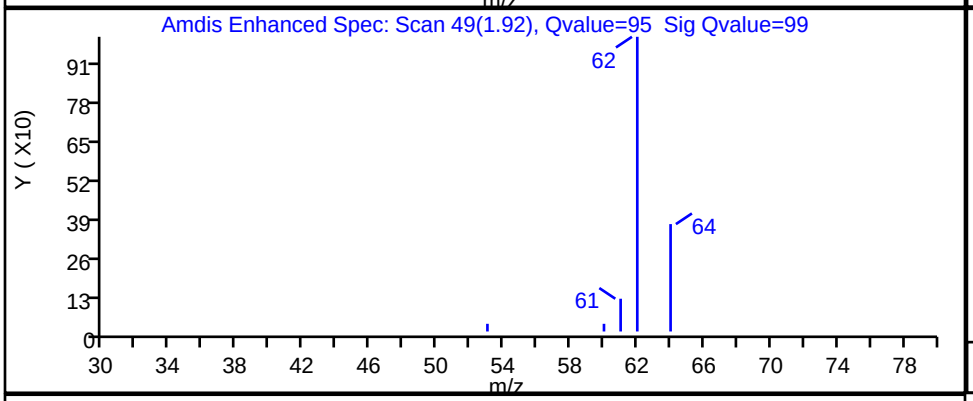
Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916406.d

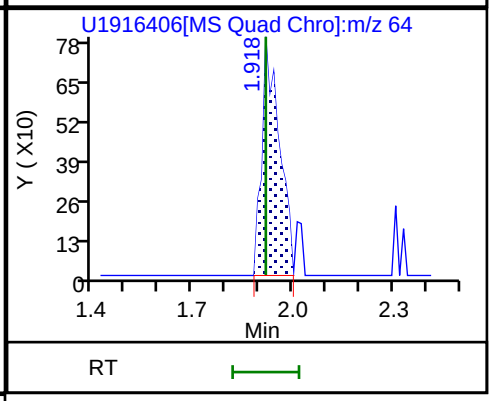
Injection Date:	17-Aug-2020 23:22:17	Instrument ID:	A3UX19
Lims ID:	240-134931-B-3	Lab Sample ID:	240-134931-3
Client ID:	MSA-SW37C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

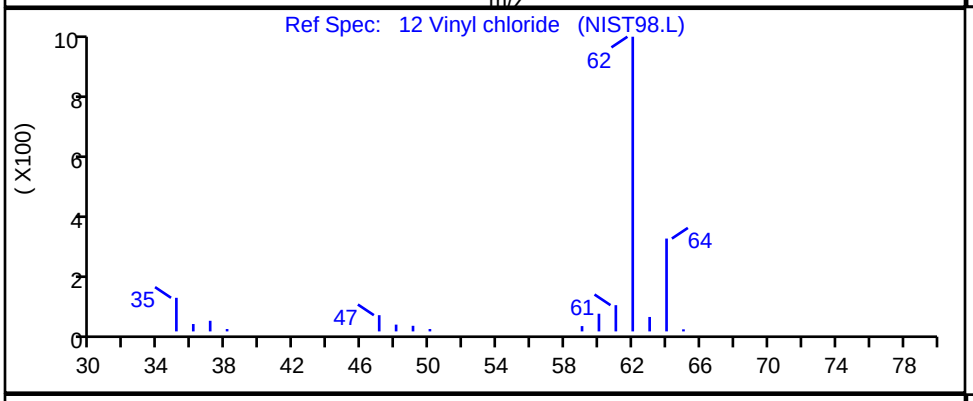
12 Vinyl chloride, CAS: 75-01-4

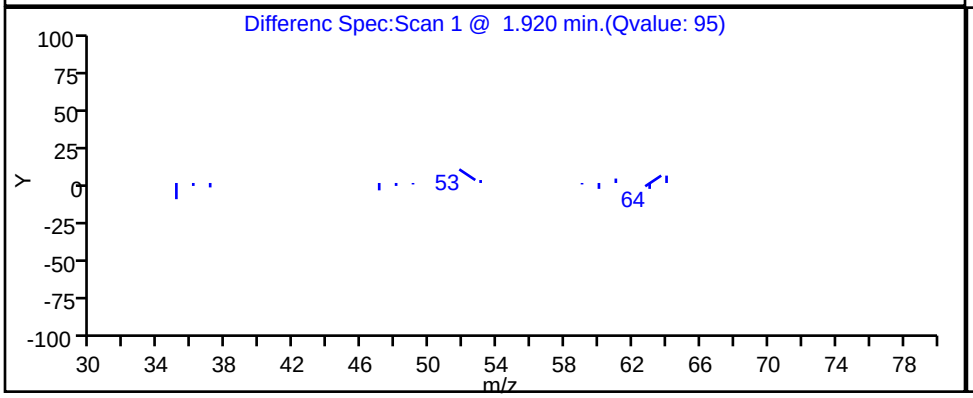


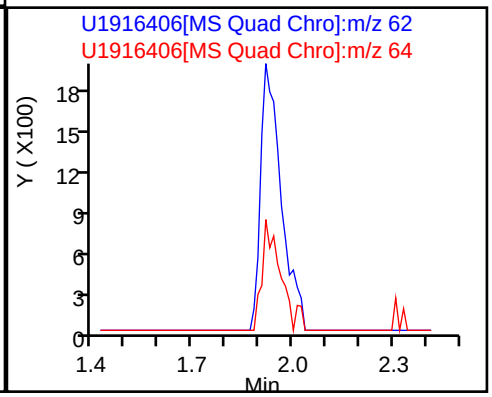












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916428.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.6		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37C-081220 Lab Sample ID: 240-134931-3

Matrix: Water Lab File ID: U1916428.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:23

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916428.d
Lims ID: 240-134931-A-3
Client ID: MSA-SW37C-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 22:04:28 ALS Bottle#: 0 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-011
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 02:41:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:36:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	899895	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	671807	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	335308	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	254338	21.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	286969	20.6	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	837260	20.8	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	282322	18.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	95	7854	0.5858	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	23443	6.64	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.602	3.578	0.024	6	636	0.5220	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	81	3833	0.2947	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	66	1187	0.5586	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

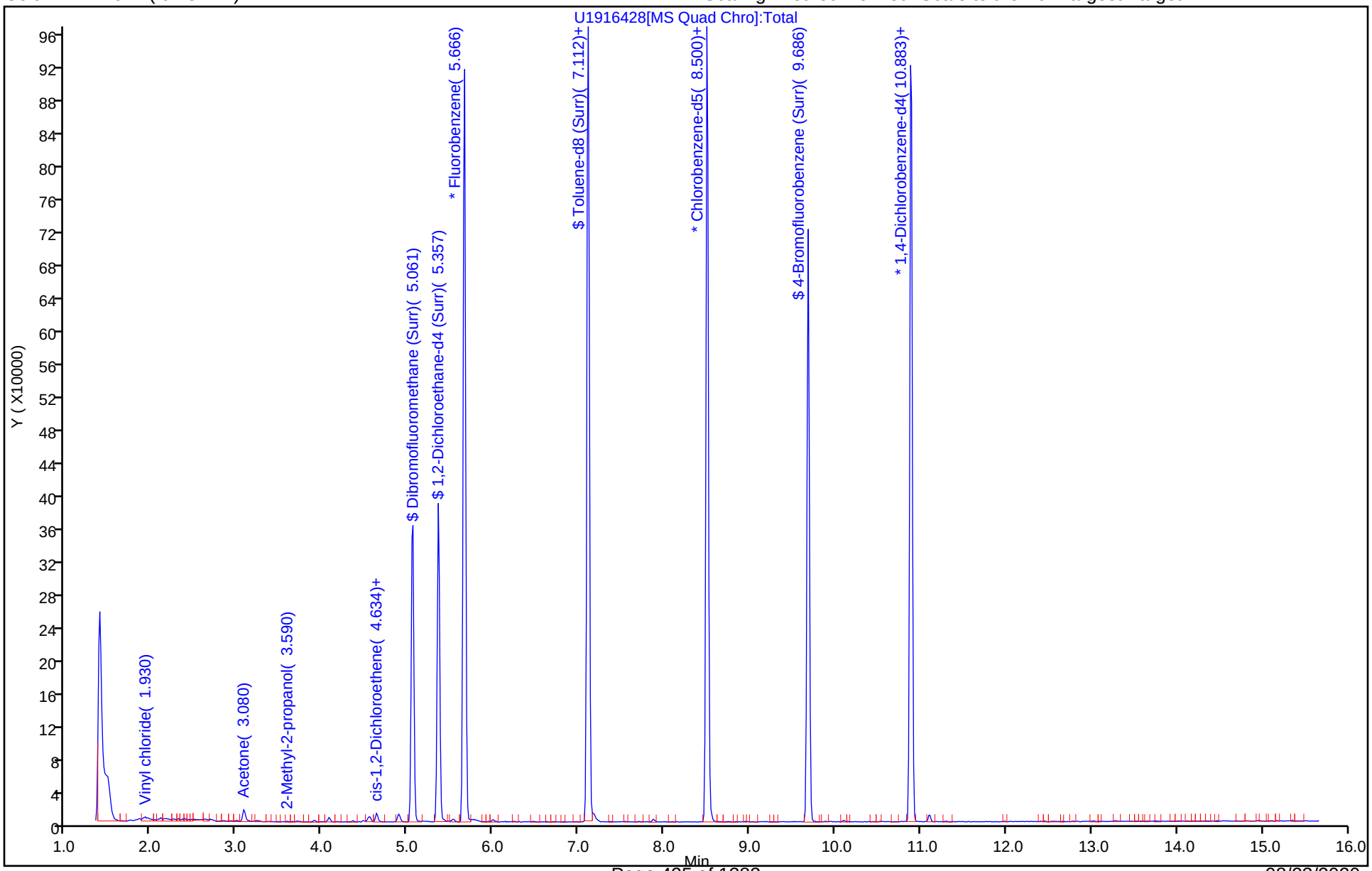
Report Date: 19-Aug-2020 13:36:18 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916428.d

Injection Date:	18-Aug-2020 22:04:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-3	Lab Sample ID:	240-134931-3	Worklist Smp#:	11
Client ID:	MSA-SW37C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916428.d
Lims ID: 240-134931-A-3
Client ID: MSA-SW37C-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 22:04:28 ALS Bottle#: 0 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-011
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 02:41:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

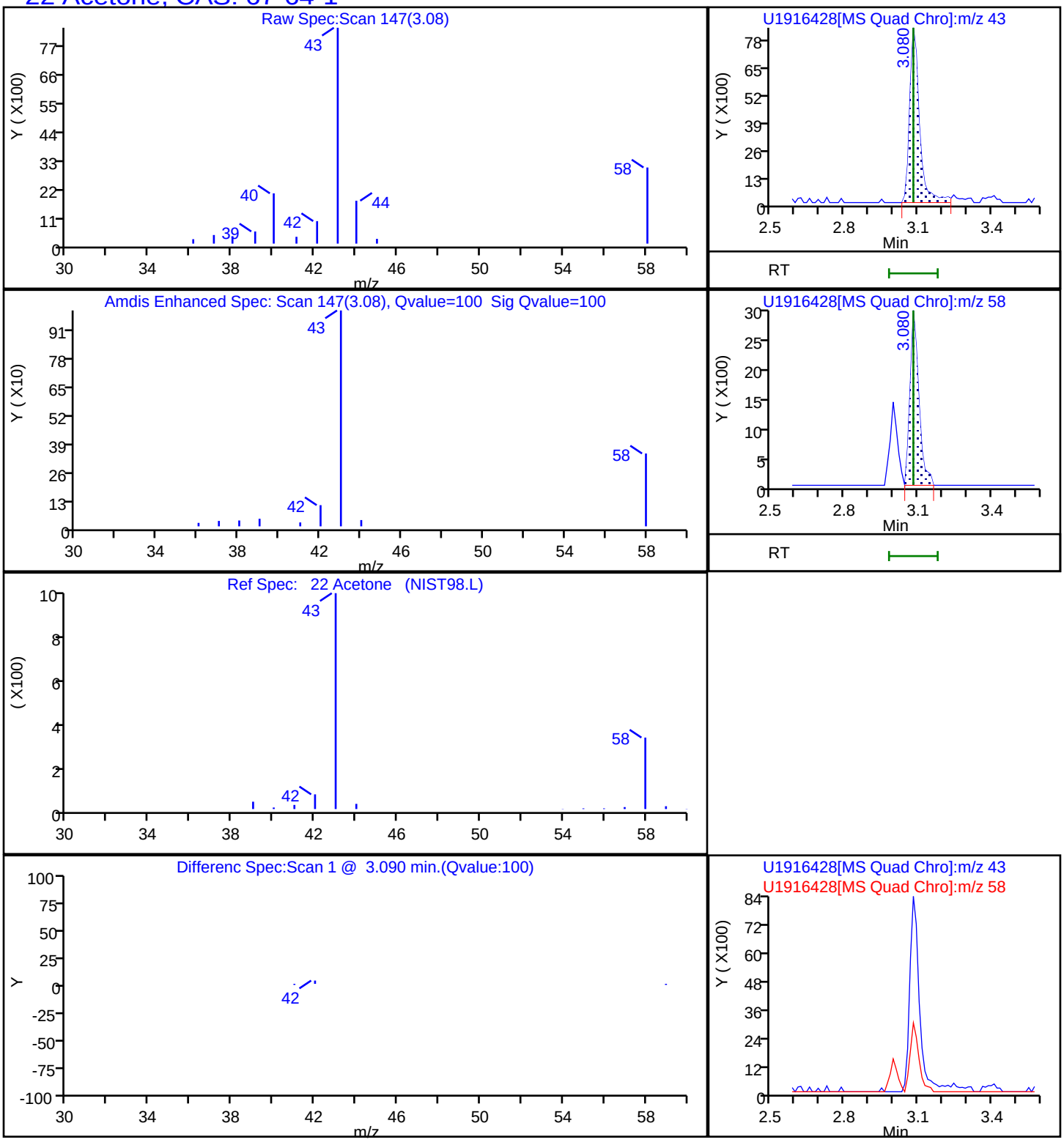
First Level Reviewer: laveyt Date: 19-Aug-2020 13:36:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	104.99
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.6	103.14
$ 6 Toluene-d8 (Surr)	20.0	20.8	103.92
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	93.12

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916428.d		
Injection Date:	18-Aug-2020 22:04:28	Instrument ID:	A3UX19
Lims ID:	240-134931-A-3	Lab Sample ID:	240-134931-3
Client ID:	MSA-SW37C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

22 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		75-130
460-00-4	4-Bromofluorobenzene (Surr)	91		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	102		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916407.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 23:44

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916407.d
Lims ID: 240-134931-A-4
Client ID: MSA-SW37D-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 23:44:32 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-020
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:46:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	923313	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	686951	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	342196	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	94	253253	20.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	288626	20.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	848358	20.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	283039	18.3	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	85	2645	0.1923	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	19935	5.51	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.590				ND	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	1591	0.7297	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	75	2238	0.1677	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

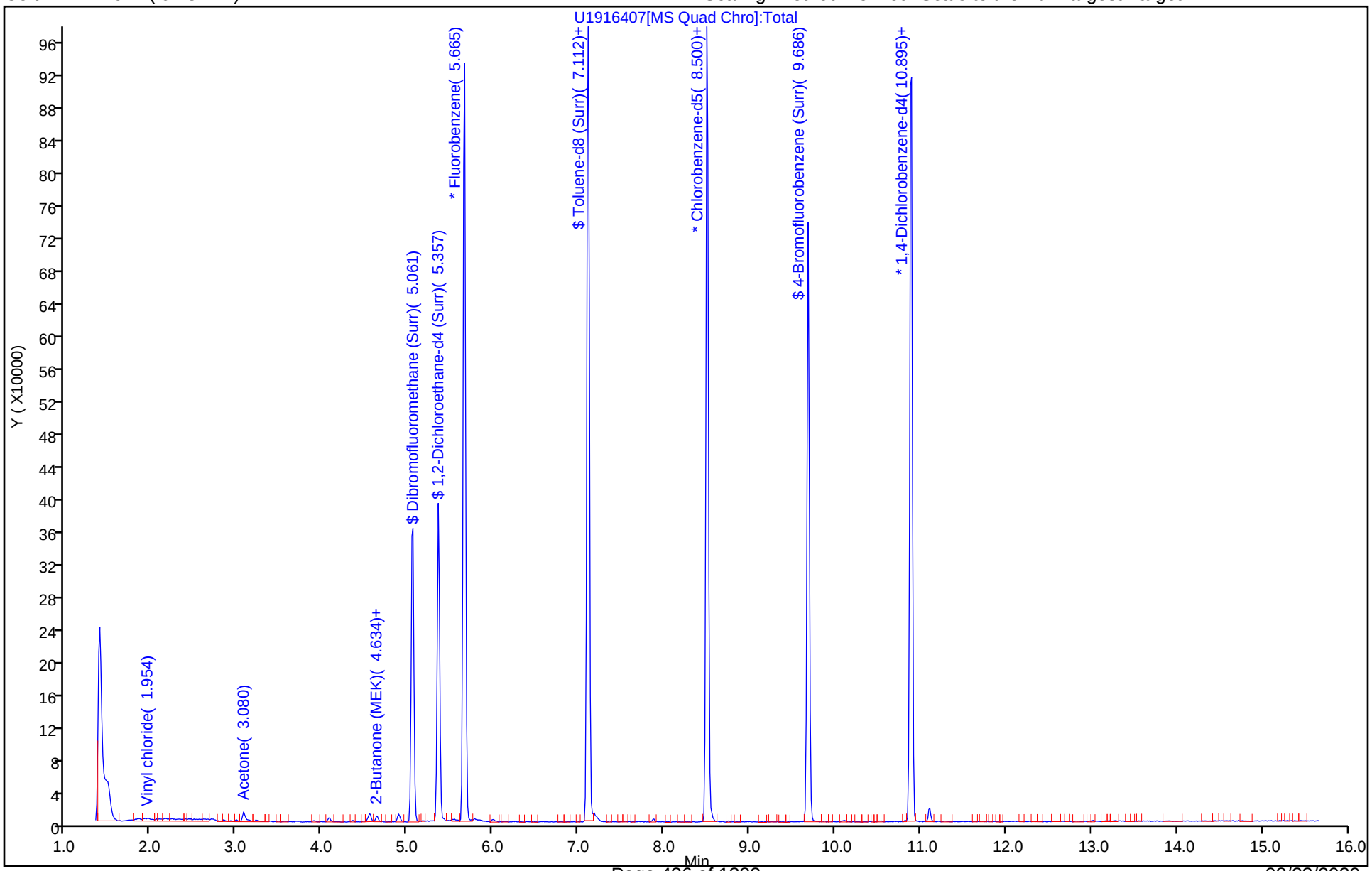
Report Date: 18-Aug-2020 14:46:42 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916407.d

Injection Date:	17-Aug-2020 23:44:32	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-4	Lab Sample ID:	240-134931-4	Worklist Smp#:	20
Client ID:	MSA-SW37D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916407.d
Lims ID: 240-134931-A-4
Client ID: MSA-SW37D-081220
Sample Type: Client
Inject. Date: 17-Aug-2020 23:44:32 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-020
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:46:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.4	101.89
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.2	101.10
$ 6 Toluene-d8 (Surr)	20.0	20.6	102.98
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.3	91.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916429.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.4		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		75-130
460-00-4	4-Bromofluorobenzene (Surr)	88		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW37D-081220 Lab Sample ID: 240-134931-4

Matrix: Water Lab File ID: U1916429.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:25

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916429.d
Lims ID: 240-134931-B-4
Client ID: MSA-SW37D-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 22:27:15 ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-012
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 02:41:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:36:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	906114	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	676535	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	335707	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	250072	20.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	280674	20.0	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	816638	20.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	269129	17.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	95	2263	0.1676	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	22860	6.44	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.578	0.012	0	257	0.2095	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	69	2236	0.1707	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	98	1321	0.6174	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

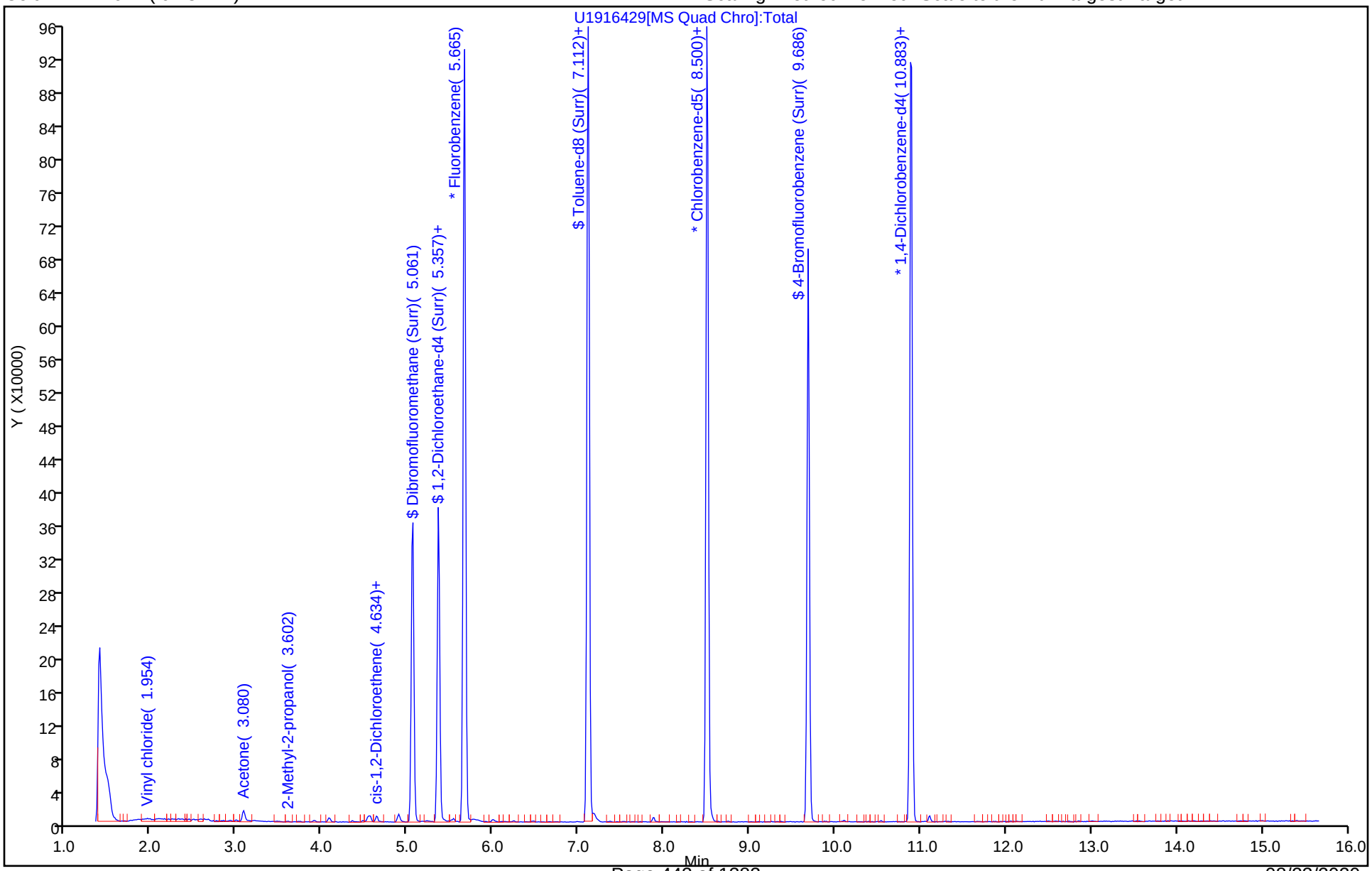
Report Date: 19-Aug-2020 13:36:52 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916429.d

Injection Date:	18-Aug-2020 22:27:15	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-4	Lab Sample ID:	240-134931-4	Worklist Smp#:	12
Client ID:	MSA-SW37D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916429.d
Lims ID: 240-134931-B-4
Client ID: MSA-SW37D-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 22:27:15 ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-012
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 02:41:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

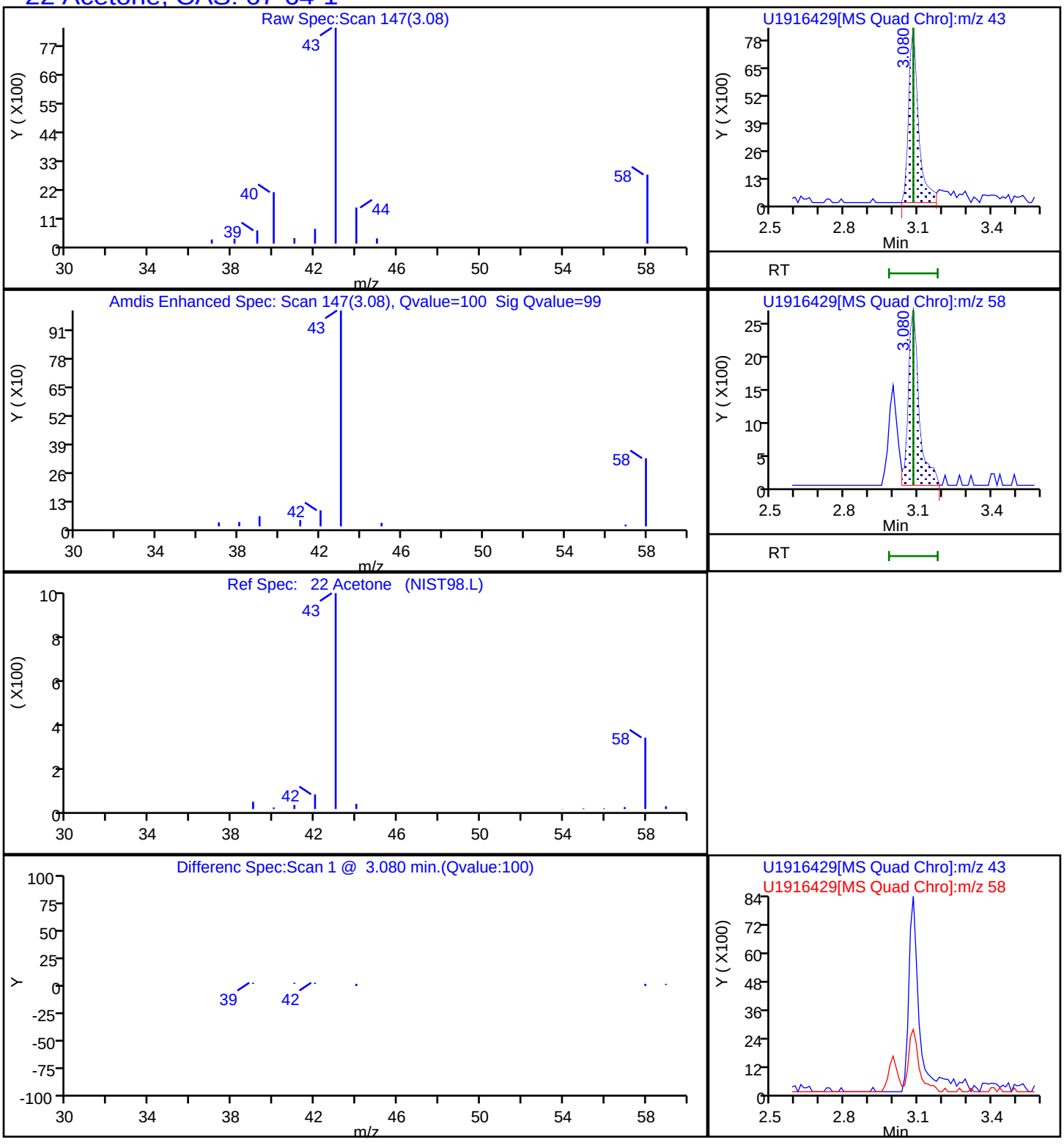
First Level Reviewer: laveyt Date: 19-Aug-2020 13:36:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.5	102.52
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.0	100.18
$ 6 Toluene-d8 (Surr)	20.0	20.1	100.65
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	88.15

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916429.d		
Injection Date:	18-Aug-2020 22:27:15	Instrument ID:	A3UX19
Lims ID:	240-134931-B-4	Lab Sample ID:	240-134931-4
Client ID:	MSA-SW37D-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

22 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	0.46	J	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.62	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.51		0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916408.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:06

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916408.d
Lims ID: 240-134931-A-5
Client ID: MSA-SW38A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 00:06:57 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-021
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:47:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	910188	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	665339	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	327616	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	256903	21.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	287103	20.4	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	838305	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	278717	18.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	96	6897	0.5086	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	27559	7.72	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.590				ND	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	83	2302	1.07	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	80	8148	0.6194	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	94	4426	0.3078	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	87	2601	0.1124	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	11113	0.4650	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

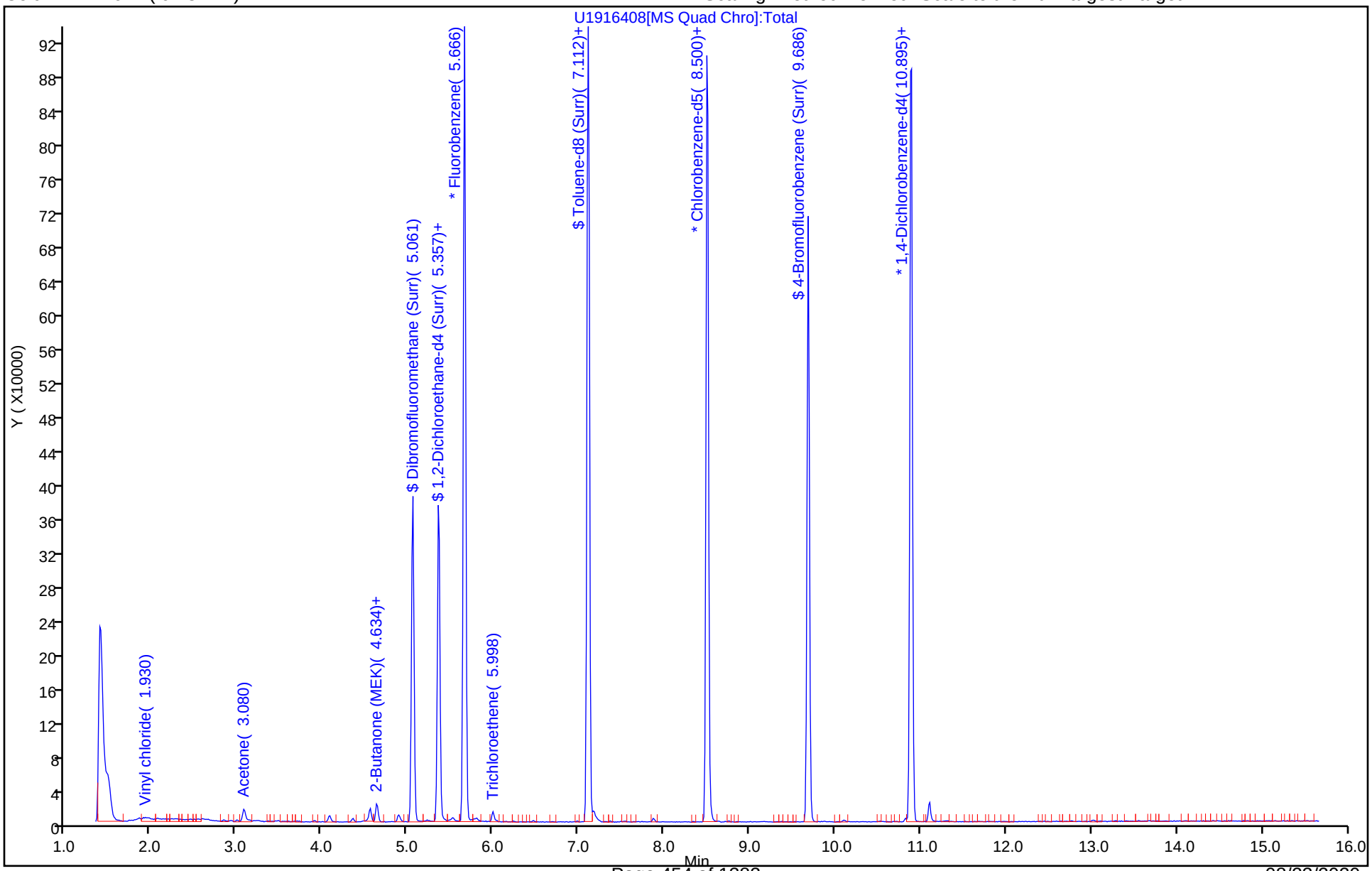
Report Date: 18-Aug-2020 14:47:12 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916408.d

Injection Date:	18-Aug-2020 00:06:57	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-5	Lab Sample ID:	240-134931-5	Worklist Smp#:	21
Client ID:	MSA-SW38A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916408.d
Lims ID: 240-134931-A-5
Client ID: MSA-SW38A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 00:06:57 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-021
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:47:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	104.85
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.4	102.02
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.06
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	92.83

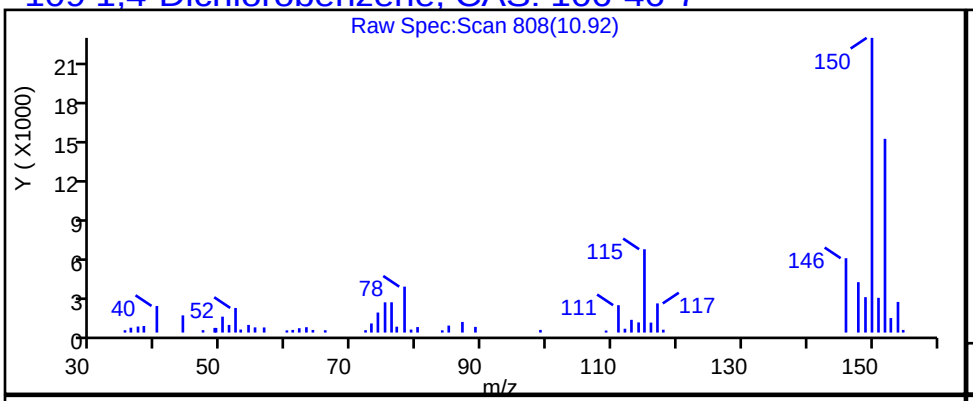
Report Date: 18-Aug-2020 14:47:13 Chrom Revision: 2.3 17-Aug-2020 20:42:08

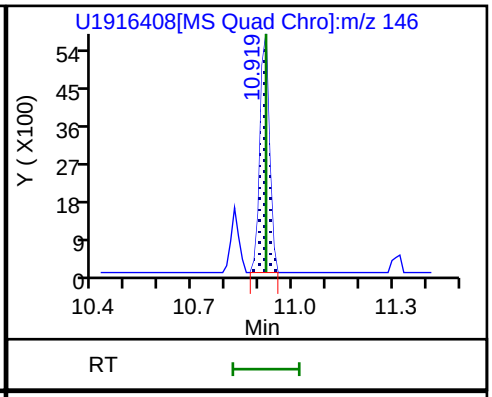
Eurofins TestAmerica, Canton

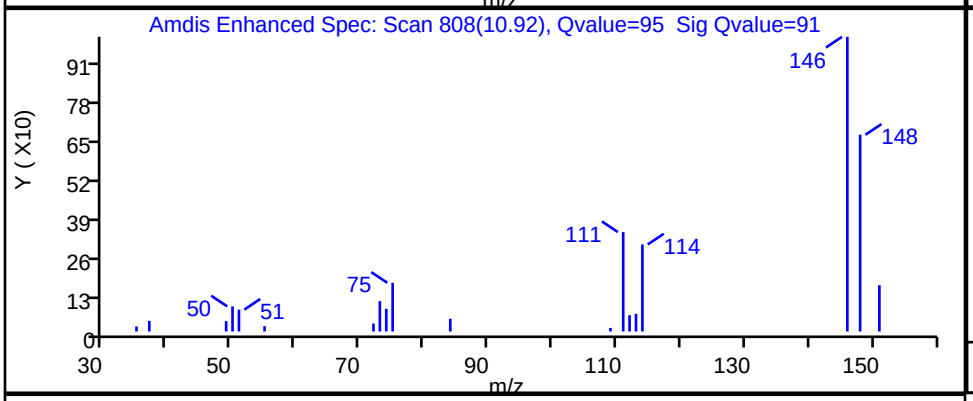
Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916408.d

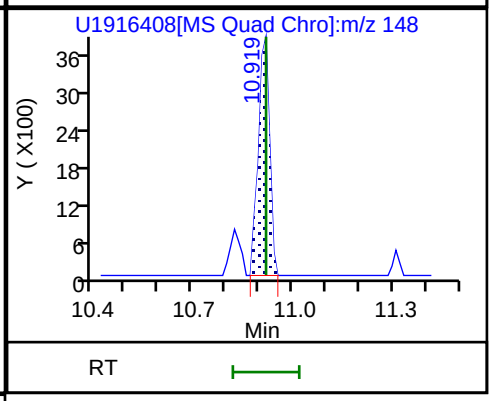
Injection Date:	18-Aug-2020 00:06:57	Instrument ID:	A3UX19		
Lims ID:	240-134931-A-5	Lab Sample ID:	240-134931-5		
Client ID:	MSA-SW38A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

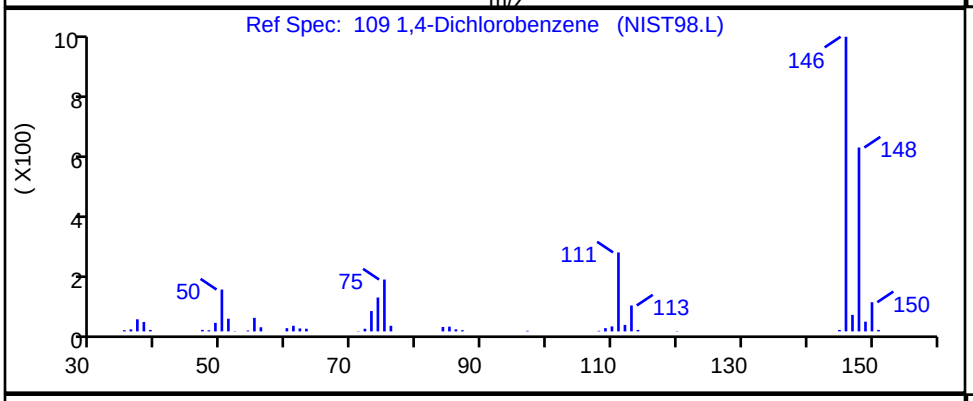
109 1,4-Dichlorobenzene, CAS: 106-46-7

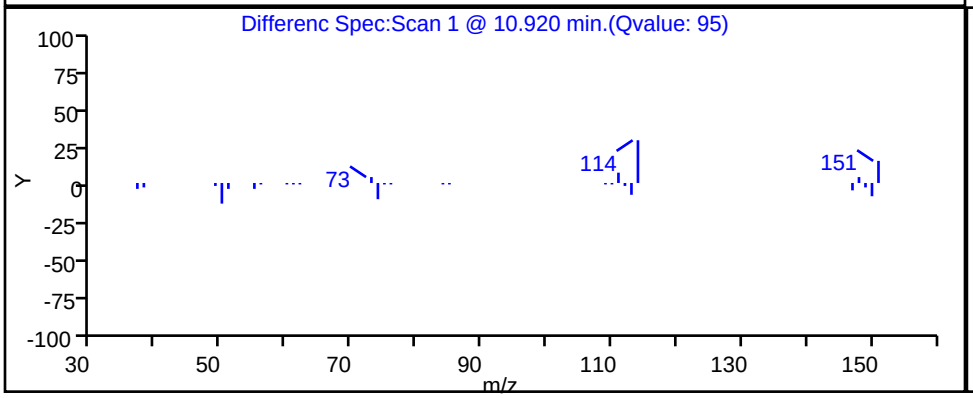


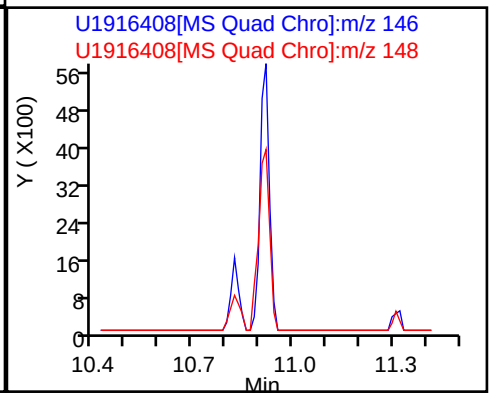












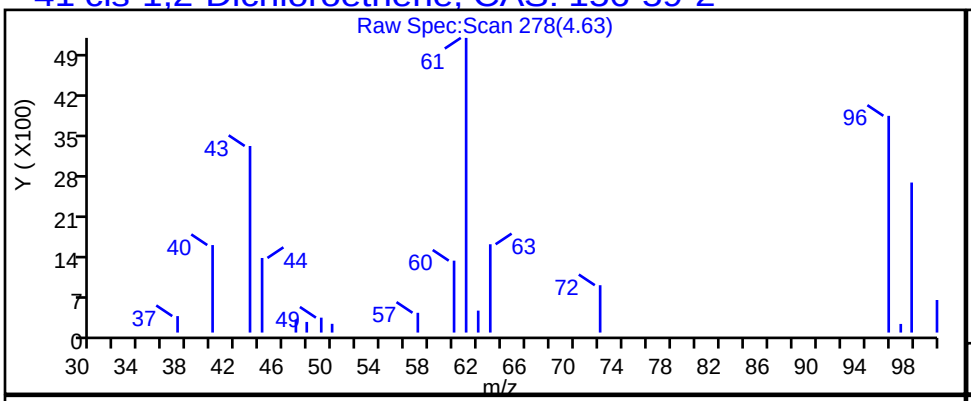
Report Date: 18-Aug-2020 14:47:13 Chrom Revision: 2.3 17-Aug-2020 20:42:08

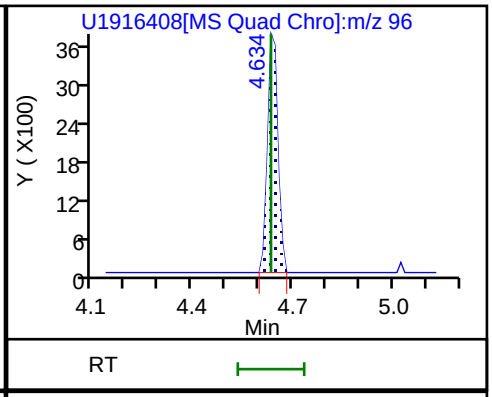
Eurofins TestAmerica, Canton

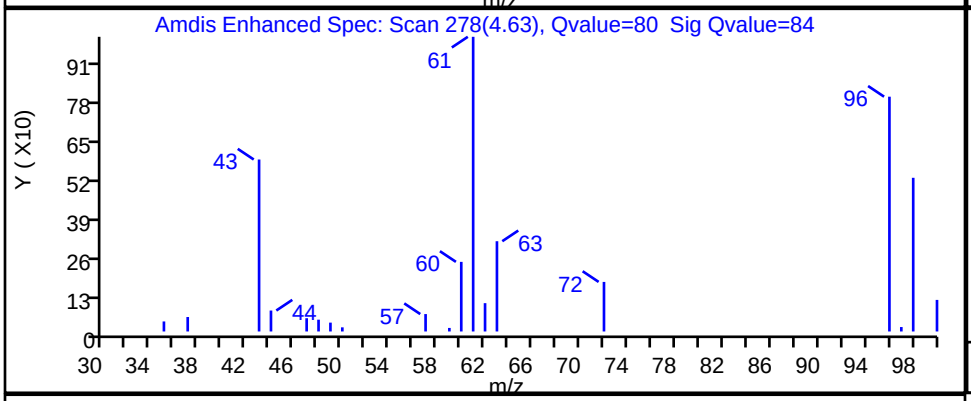
Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916408.d

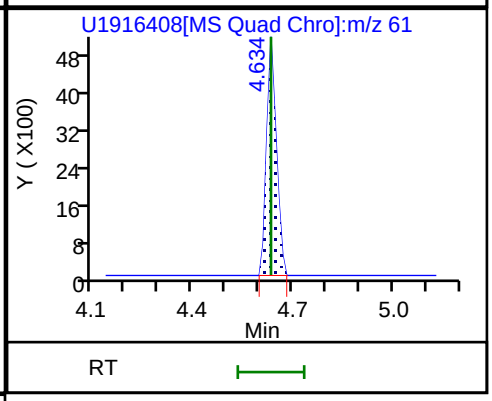
Injection Date:	18-Aug-2020 00:06:57	Instrument ID:	A3UX19		
Lims ID:	240-134931-A-5	Lab Sample ID:	240-134931-5		
Client ID:	MSA-SW38A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

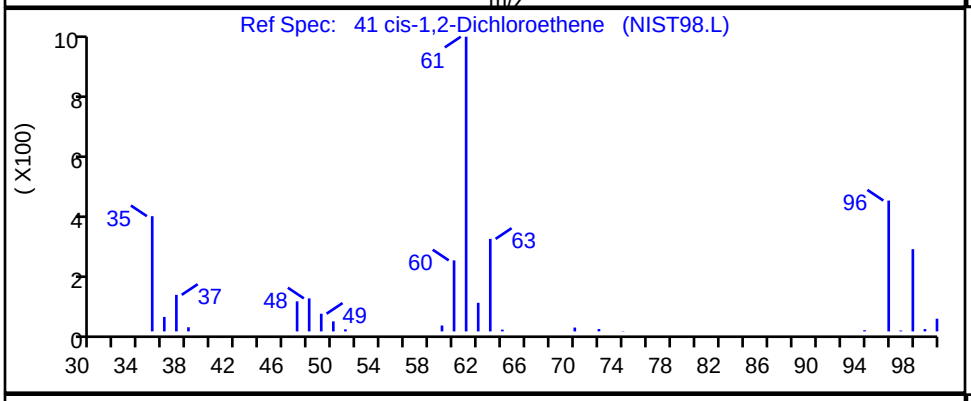
41 cis-1,2-Dichloroethene, CAS: 156-59-2

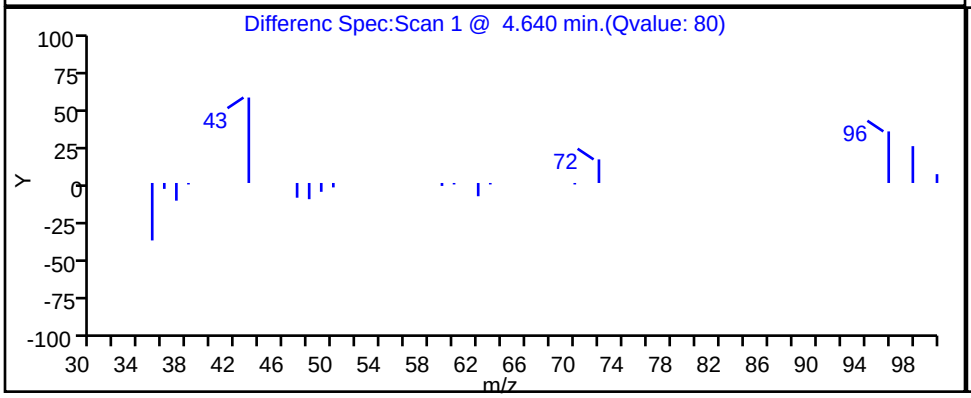


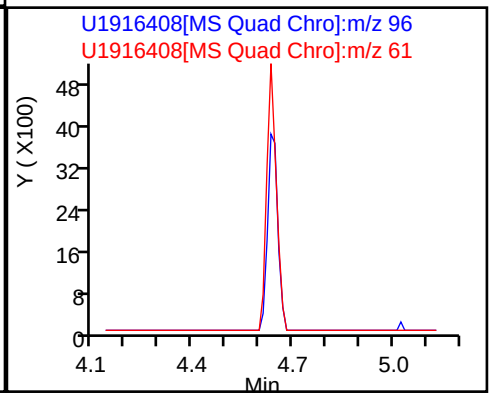










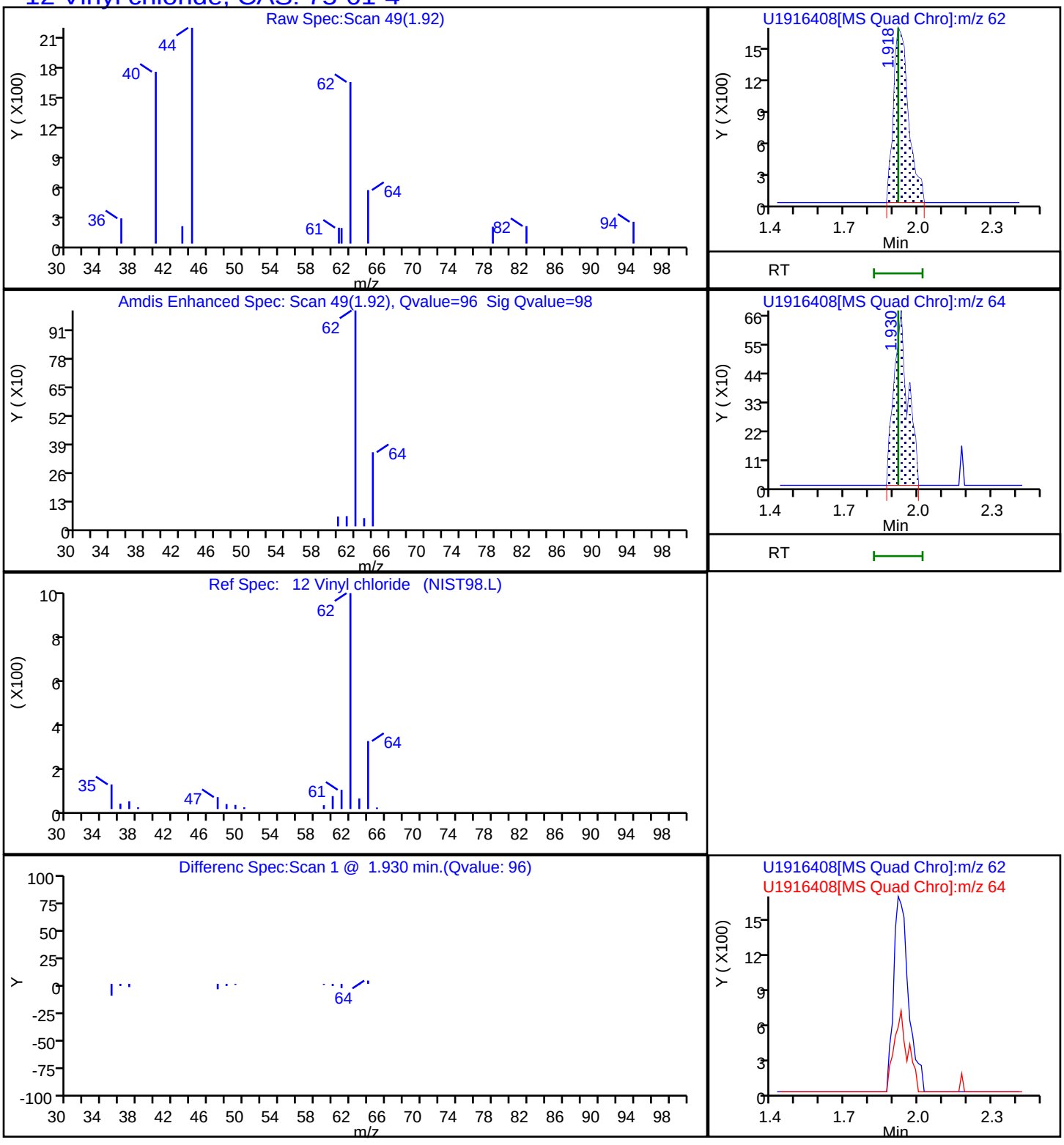


Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916408.d

Injection Date:	18-Aug-2020 00:06:57	Instrument ID:	A3UX19		
Lims ID:	240-134931-A-5	Lab Sample ID:	240-134931-5		
Client ID:	MSA-SW38A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Vinyl chloride, CAS: 75-01-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916430.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	9.3		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38A-081220 Lab Sample ID: 240-134931-5

Matrix: Water Lab File ID: U1916430.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:33

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 22:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916430.d
Lims ID: 240-134931-C-5
Client ID: MSA-SW38A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 22:49:39 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-013
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 02:41:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:37:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	897663	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	658154	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	332914	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	254950	21.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	292627	21.1	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	831784	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	282385	19.0	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	92	6589	0.4927	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	32824	9.33	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.578				ND	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	80	8376	0.6456	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	82	2078	0.9803	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	93	4279	0.3017	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	88	2412	0.1026	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	92	11103	0.4571	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

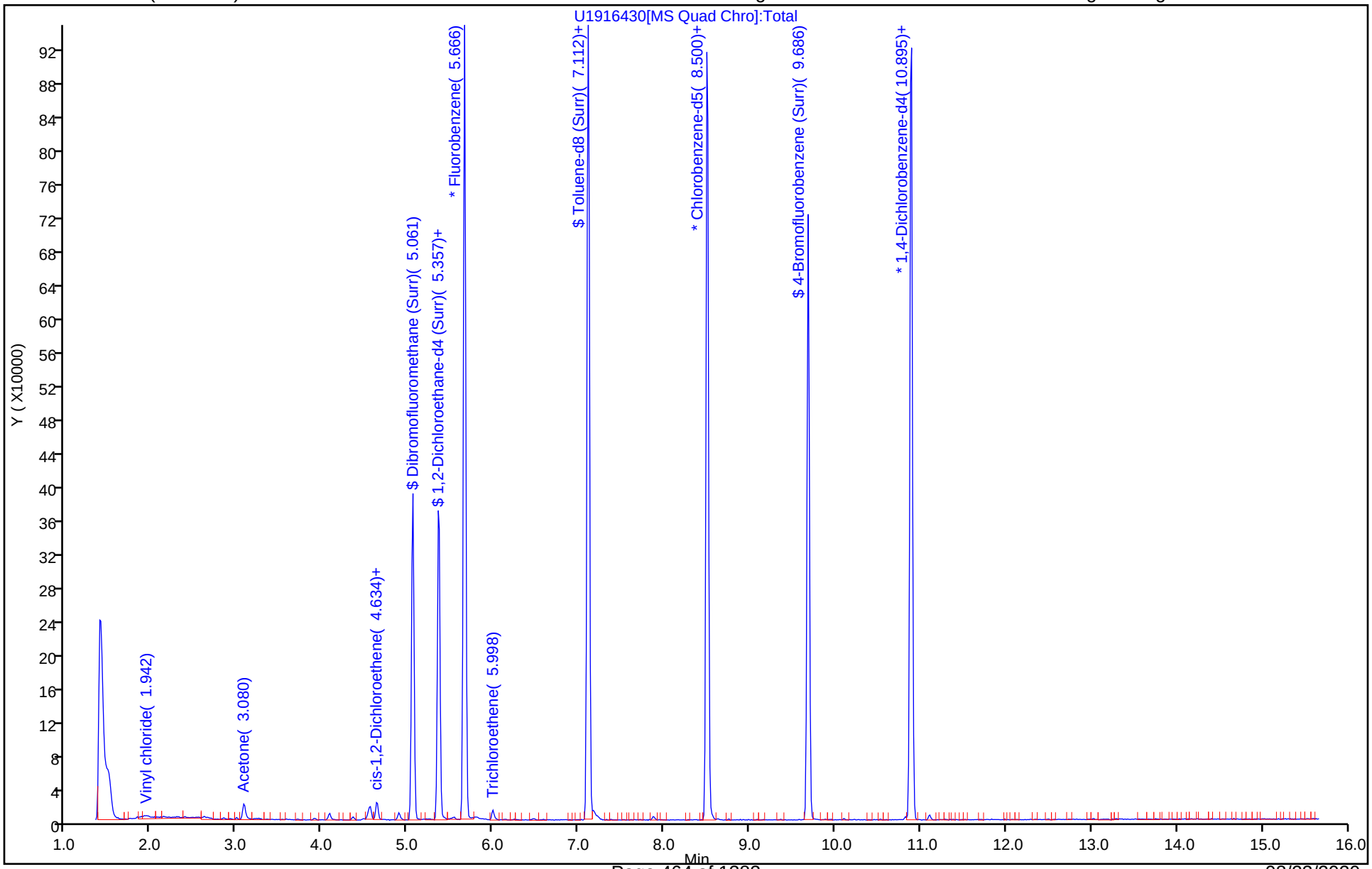
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 19-Aug-2020 13:37:24 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916430.d				
Injection Date:	18-Aug-2020 22:49:39	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-5	Lab Sample ID:	240-134931-5	Worklist Smp#:	13
Client ID:	MSA-SW38A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916430.d
Lims ID: 240-134931-C-5
Client ID: MSA-SW38A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 22:49:39 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-013
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 02:41:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

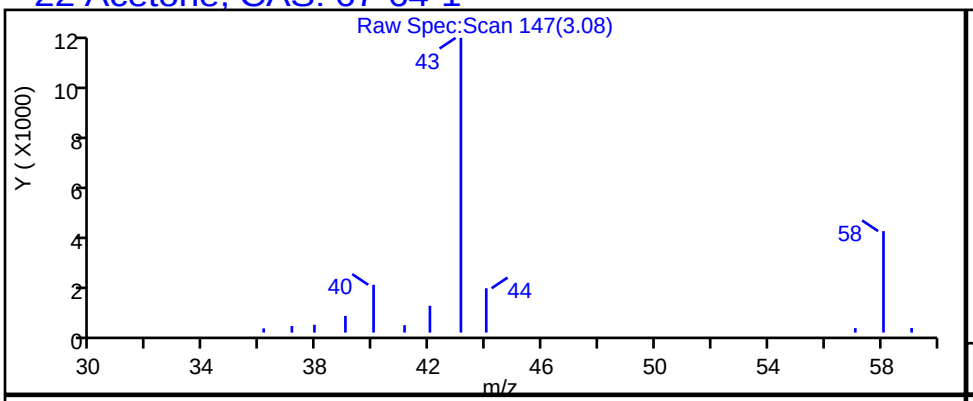
First Level Reviewer: laveyt Date: 19-Aug-2020 13:37:24

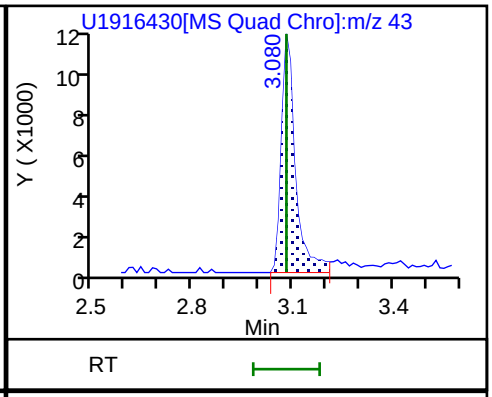
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.50
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.1	105.43
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.38
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.0	95.07

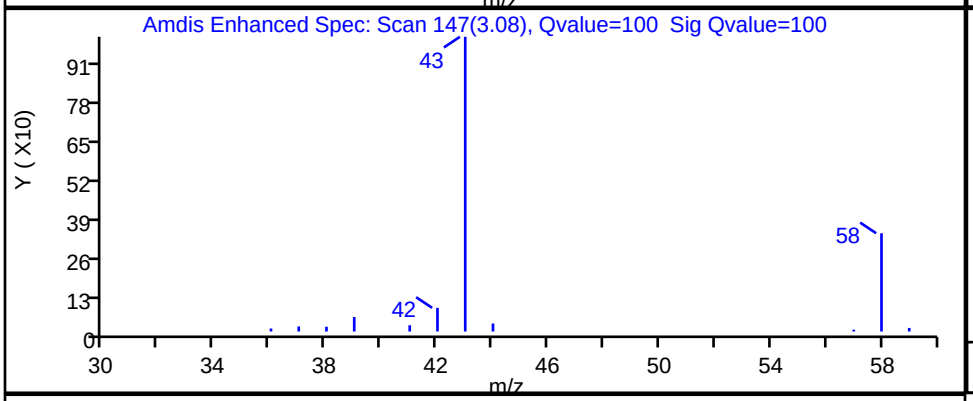
Eurofins TestAmerica, Canton

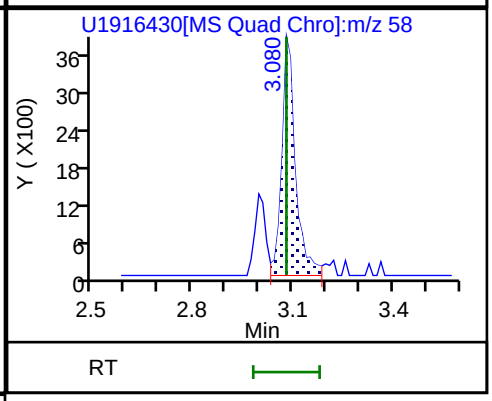
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916430.d		
Injection Date:	18-Aug-2020 22:49:39	Instrument ID:	A3UX19
Lims ID:	240-134931-C-5	Lab Sample ID:	240-134931-5
Client ID:	MSA-SW38A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

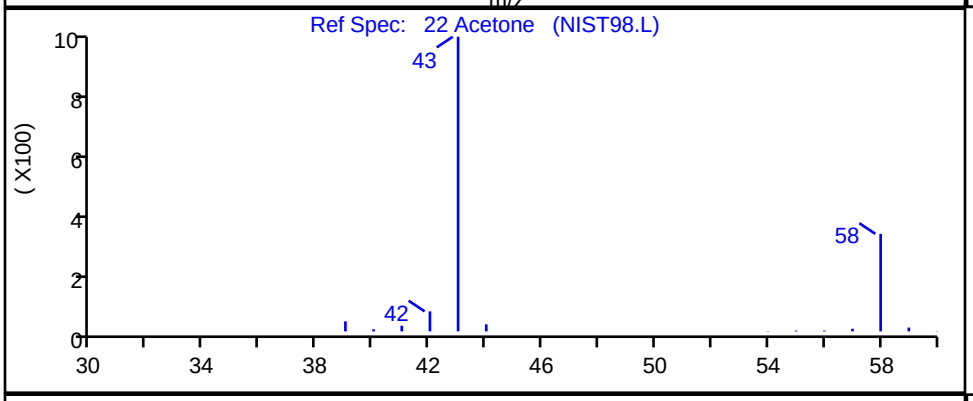
22 Acetone, CAS: 67-64-1

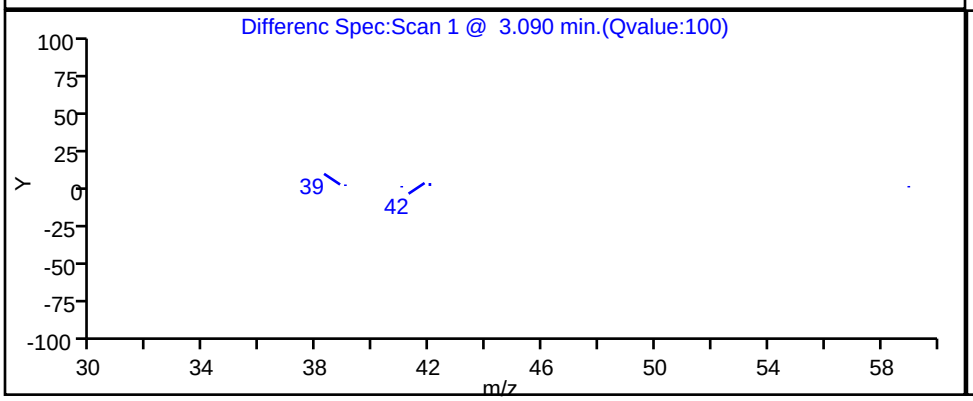


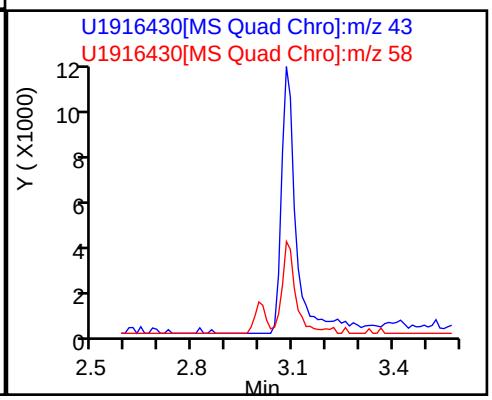












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916409.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:29

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916409.d
Lims ID: 240-134931-A-6
Client ID: MSA-SW38B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 00:29:22 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-022
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:47:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	913681	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	89	684880	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	338002	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	94	255089	20.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	293859	20.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	846713	20.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	287538	18.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.906	1.918	-0.012	93	1571	0.1154	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.069	3.080	-0.012	100	25862	7.22	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.590	-0.012	6	386	0.3120	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	98	1787	0.8283	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	60	1774	0.1343	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	91	1722	0.1193	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

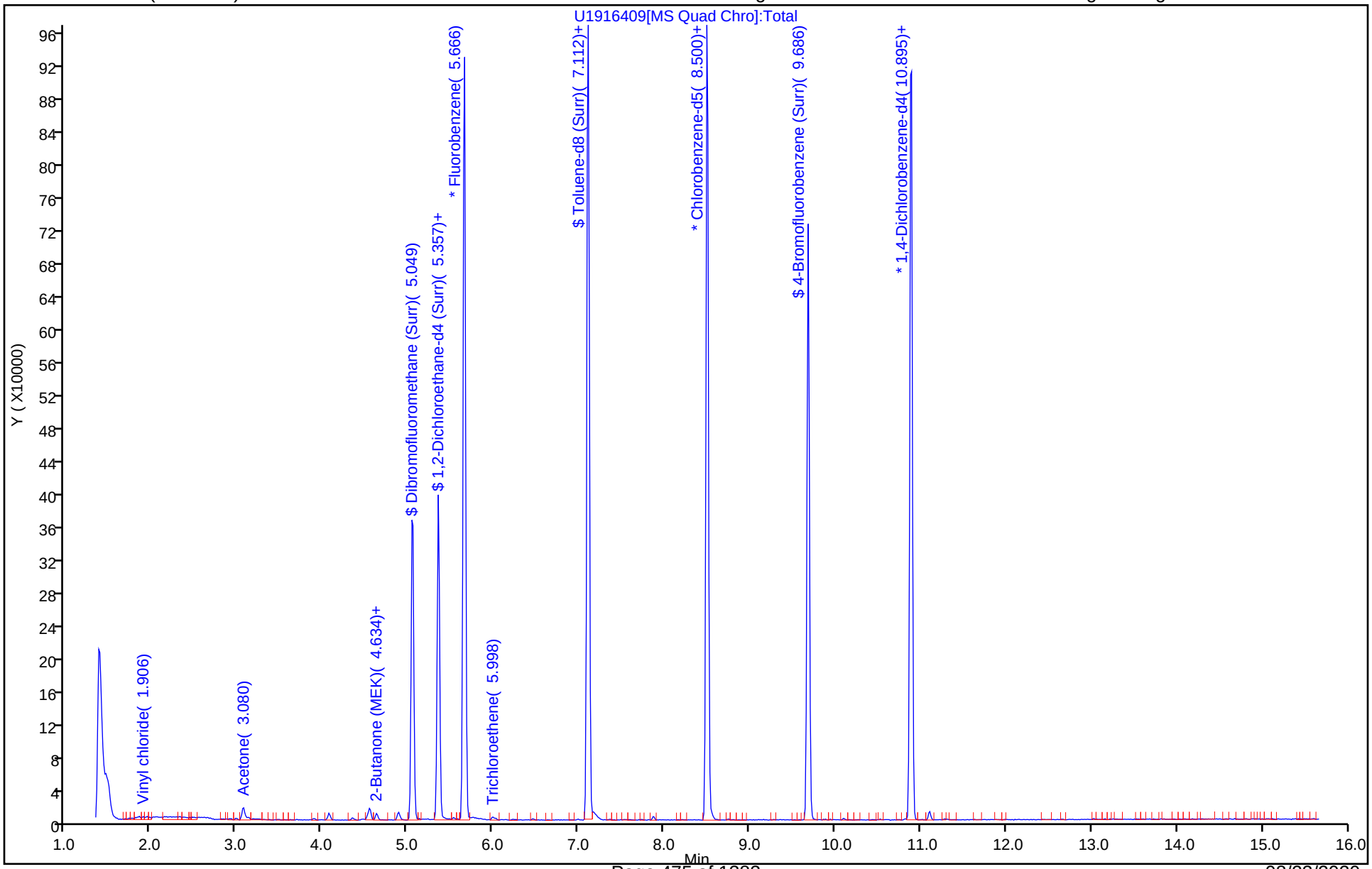
Report Date: 18-Aug-2020 14:47:44 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916409.d

Injection Date:	18-Aug-2020 00:29:22	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-6	Lab Sample ID:	240-134931-6	Worklist Smp#:	22
Client ID:	MSA-SW38B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916409.d
Lims ID: 240-134931-A-6
Client ID: MSA-SW38B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 00:29:22 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-022
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:45:22 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:47:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.7	103.71
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	104.02
$ 6 Toluene-d8 (Surr)	20.0	20.6	103.09
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	93.03

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916431.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	8.4		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	108		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38B-081220 Lab Sample ID: 240-134931-6

Matrix: Water Lab File ID: U1916431.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:36

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916431.d
Lims ID: 240-134931-B-6
Client ID: MSA-SW38B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 23:12:05 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-014
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:38:07 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:38:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	896010	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	668841	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	331560	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	261307	21.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	293946	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	855772	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	279277	18.5	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	U
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	29470	8.39	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.578	0.012	16	727	0.5992	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	54	1628	0.1257	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1655	0.7822	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

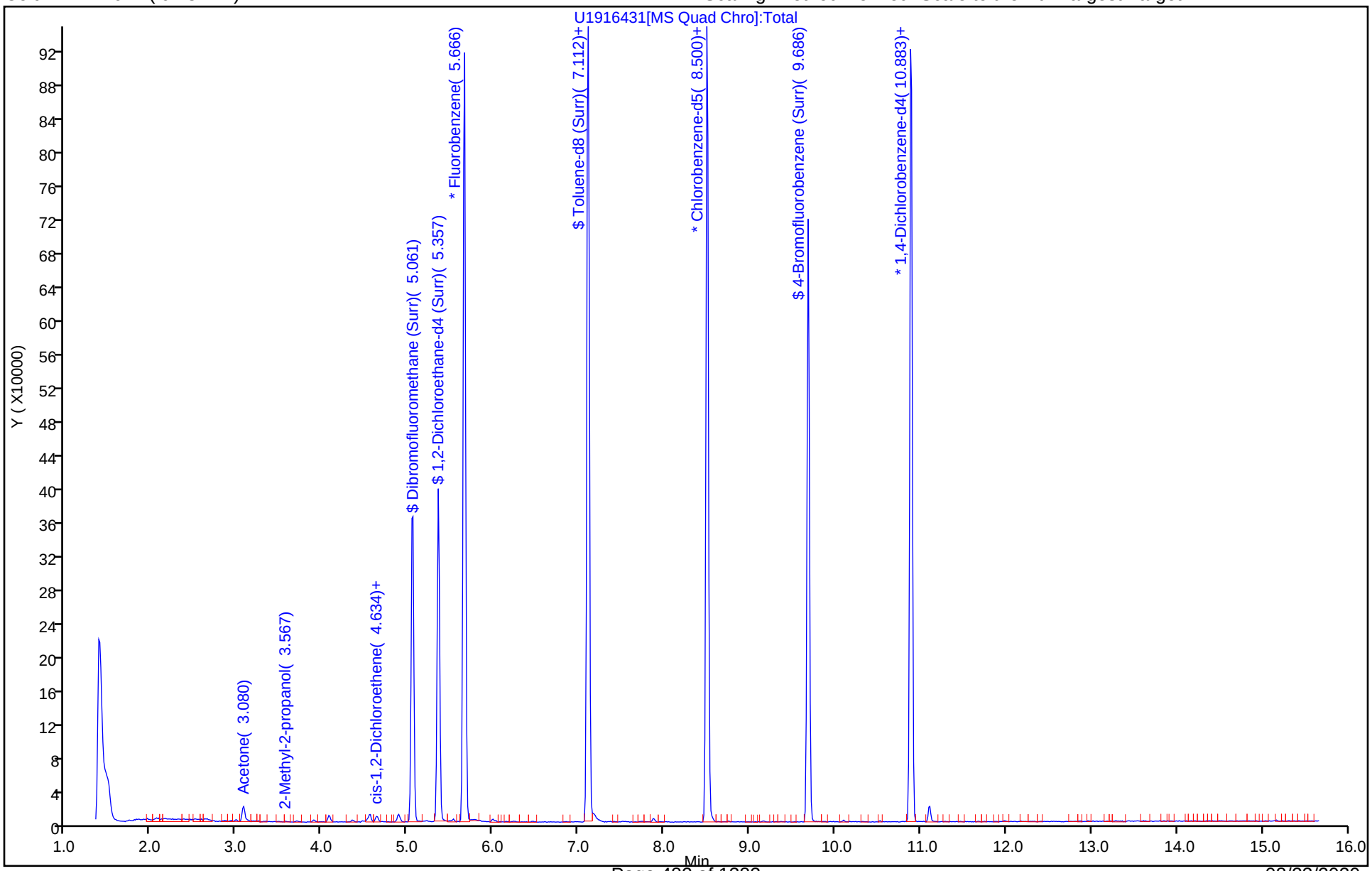
Report Date: 19-Aug-2020 13:38:08 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916431.d

Injection Date:	18-Aug-2020 23:12:05	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-6	Lab Sample ID:	240-134931-6	Worklist Smp#:	14
Client ID:	MSA-SW38B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916431.d
Lims ID: 240-134931-B-6
Client ID: MSA-SW38B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 23:12:05 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-014
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:38:07 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

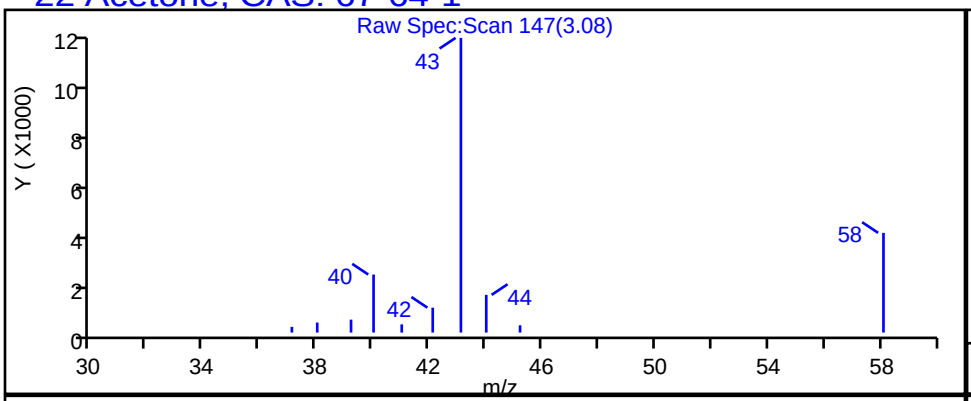
First Level Reviewer: laveyt Date: 19-Aug-2020 13:38:07

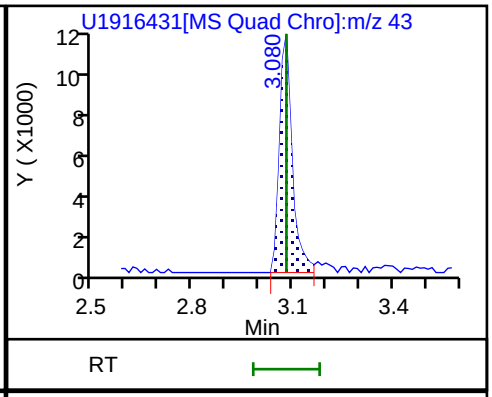
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.7	108.33
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	106.10
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.69
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.52

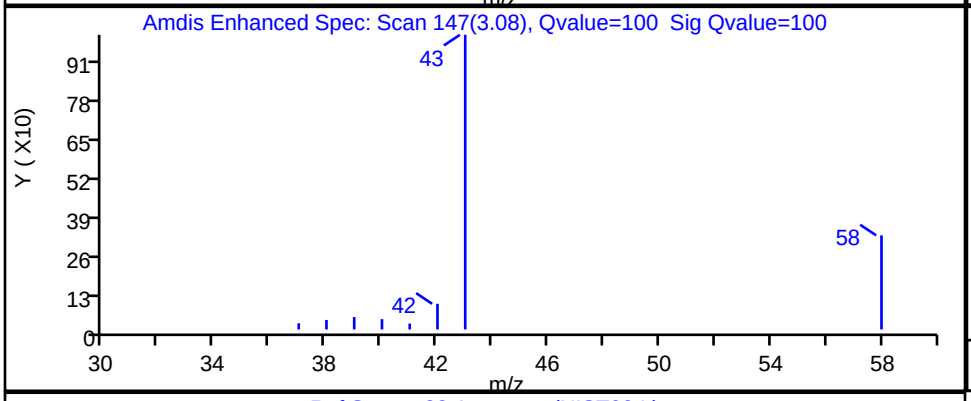
Eurofins TestAmerica, Canton

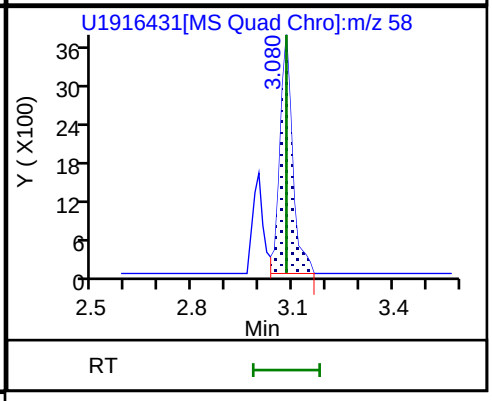
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916431.d		
Injection Date:	18-Aug-2020 23:12:05	Instrument ID:	A3UX19
Lims ID:	240-134931-B-6	Lab Sample ID:	240-134931-6
Client ID:	MSA-SW38B-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

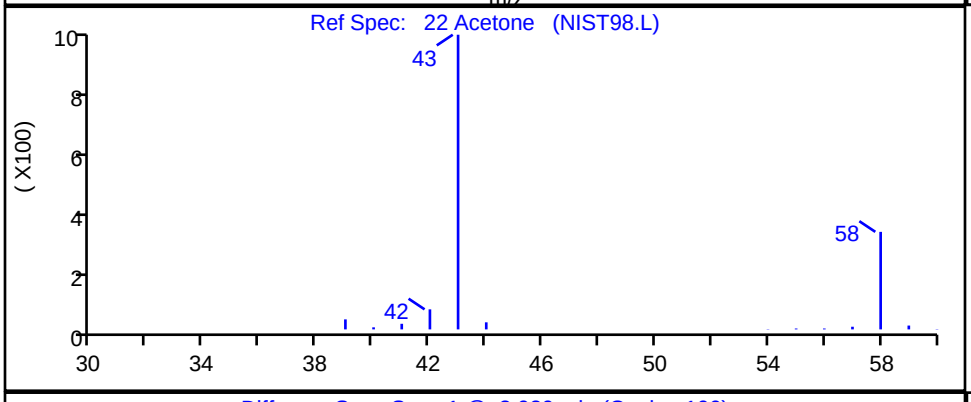
22 Acetone, CAS: 67-64-1

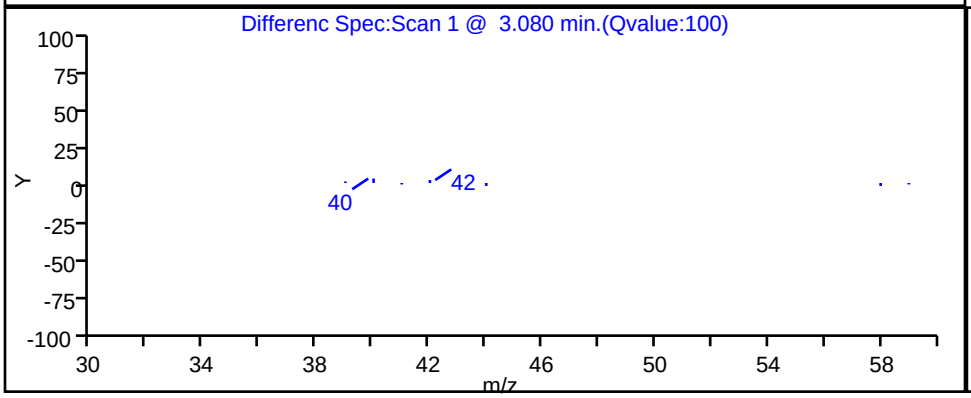


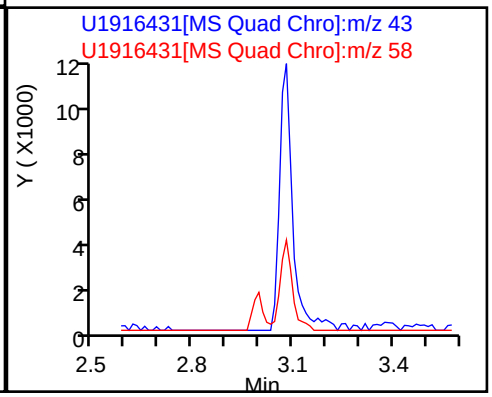












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38C-081220 Lab Sample ID: 240-134931-7

Matrix: Water Lab File ID: U1916410.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:39

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 00:51

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916410.d
Lims ID: 240-134931-B-7
Client ID: MSA-SW38C-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 00:51:46 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-023
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:48:08 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:48:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	888598	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	659768	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	331894	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	250676	21.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	286693	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	830400	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	282461	19.0	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	98	14592	4.19	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.590				ND	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	91	846	0.4032	
41 cis-1,2-Dichloroethene	96		4.634				ND	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

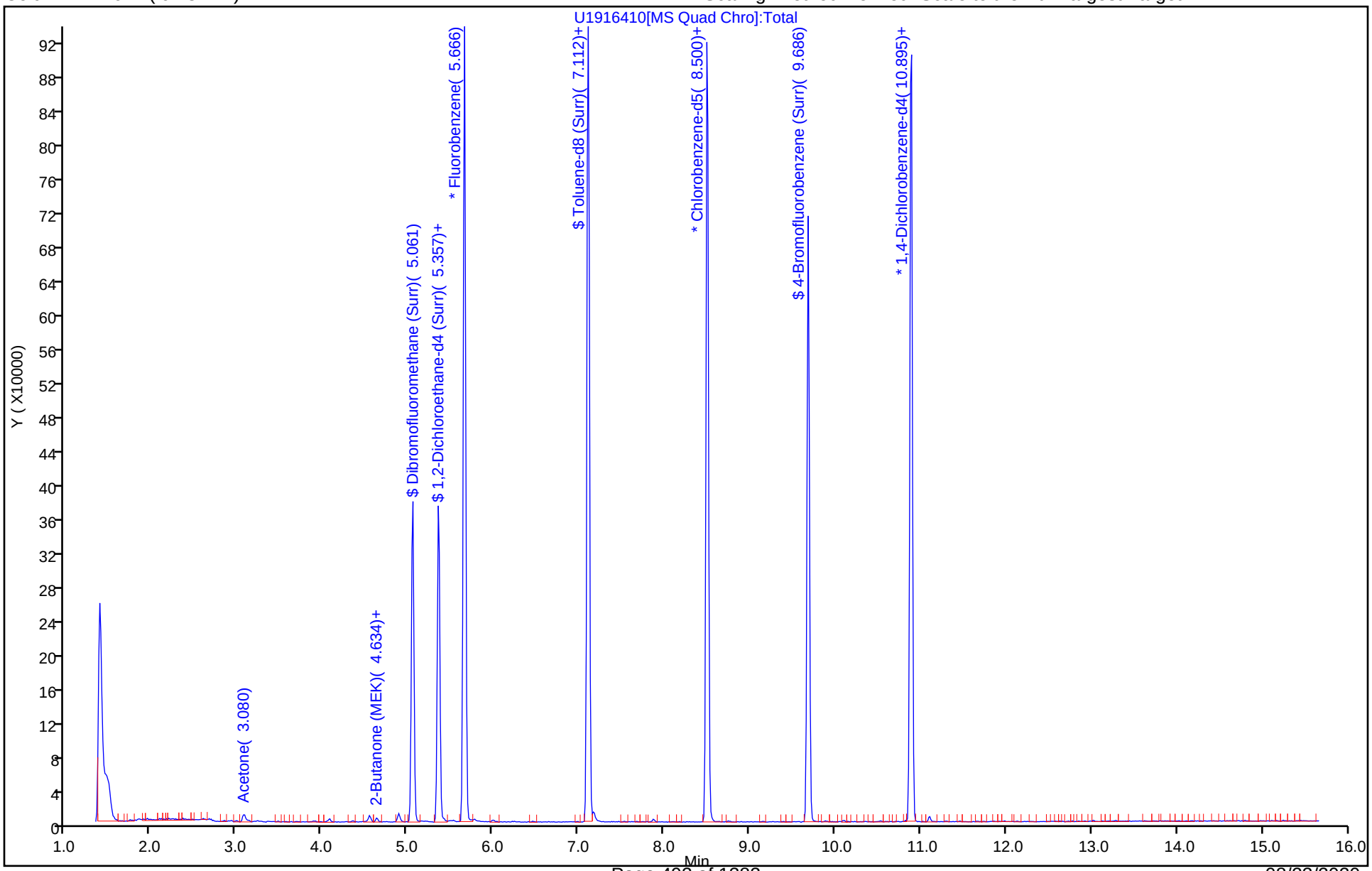
Report Date: 18-Aug-2020 14:48:08 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916410.d

Injection Date:	18-Aug-2020 00:51:46	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-7	Lab Sample ID:	240-134931-7	Worklist Smp#:	23
Client ID:	MSA-SW38C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916410.d
Lims ID: 240-134931-B-7
Client ID: MSA-SW38C-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 00:51:46 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-023
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:48:08 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:48:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	104.79
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.35
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.95
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.0	94.87

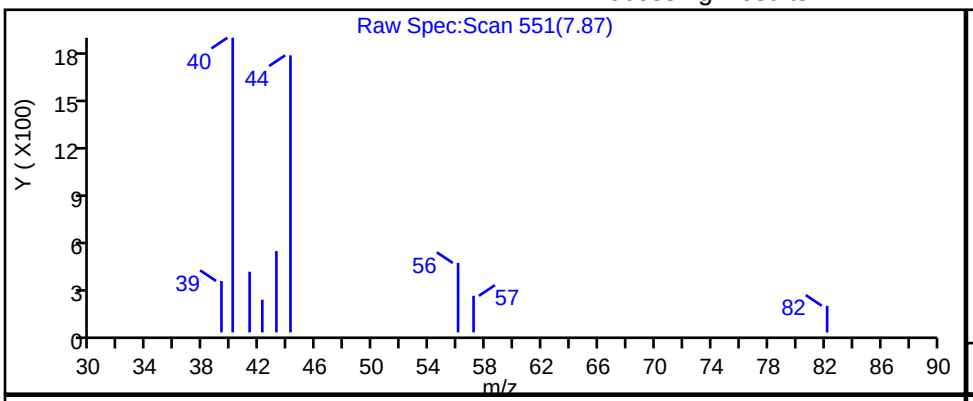
User Disabled Compound Report

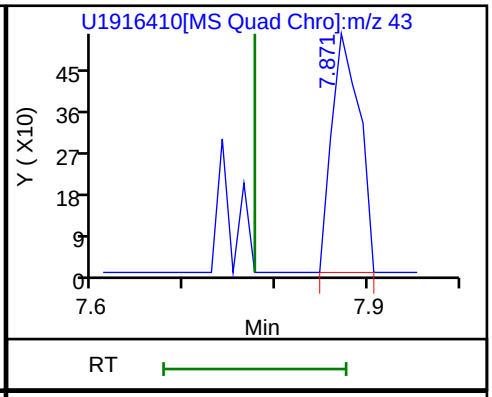
Eurofins TestAmerica, Canton

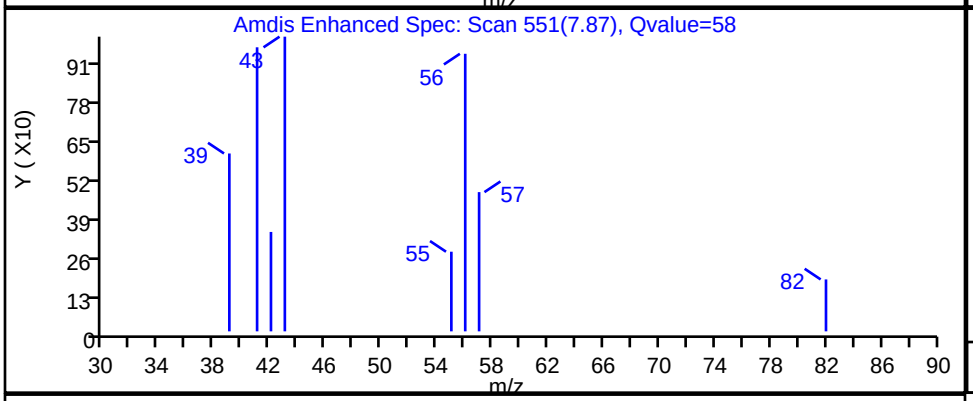
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916410.d				
Injection Date:	18-Aug-2020 00:51:46	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-7	Lab Sample ID:	240-134931-7		
Client ID:	MSA-SW38C-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

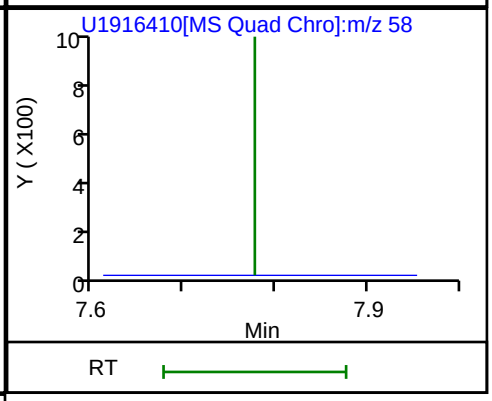
77 2-Hexanone, CAS: 591-78-6

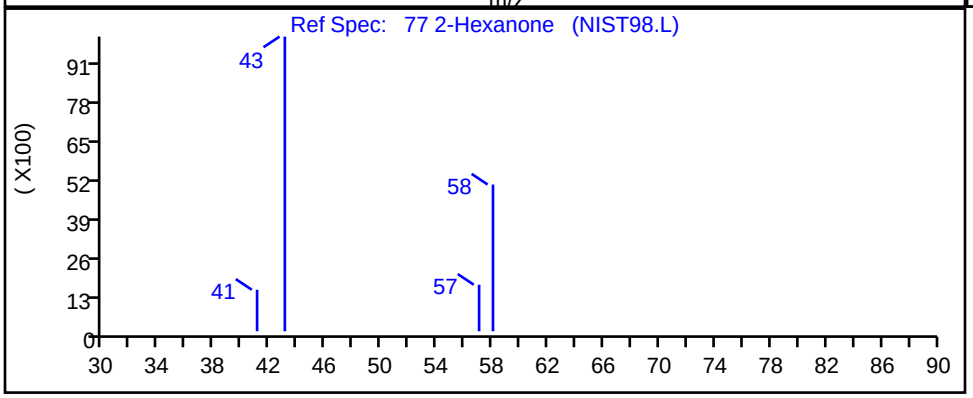
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1108	0.106664
7.78	58.00	0	

Reviewer: laveyt, 18-Aug-2020 14:48:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916411.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:14

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916411.d
Lims ID: 240-134931-A-8
Client ID: MSA-SW38D-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 01:14:00 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:48:48 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:48:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	904030	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	670180	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	337312	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	93	258455	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	288835	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	840810	20.9	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	288372	19.1	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	26133	7.37	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.590				ND	U
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	99	1750	0.8198	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	60	1700	0.1301	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

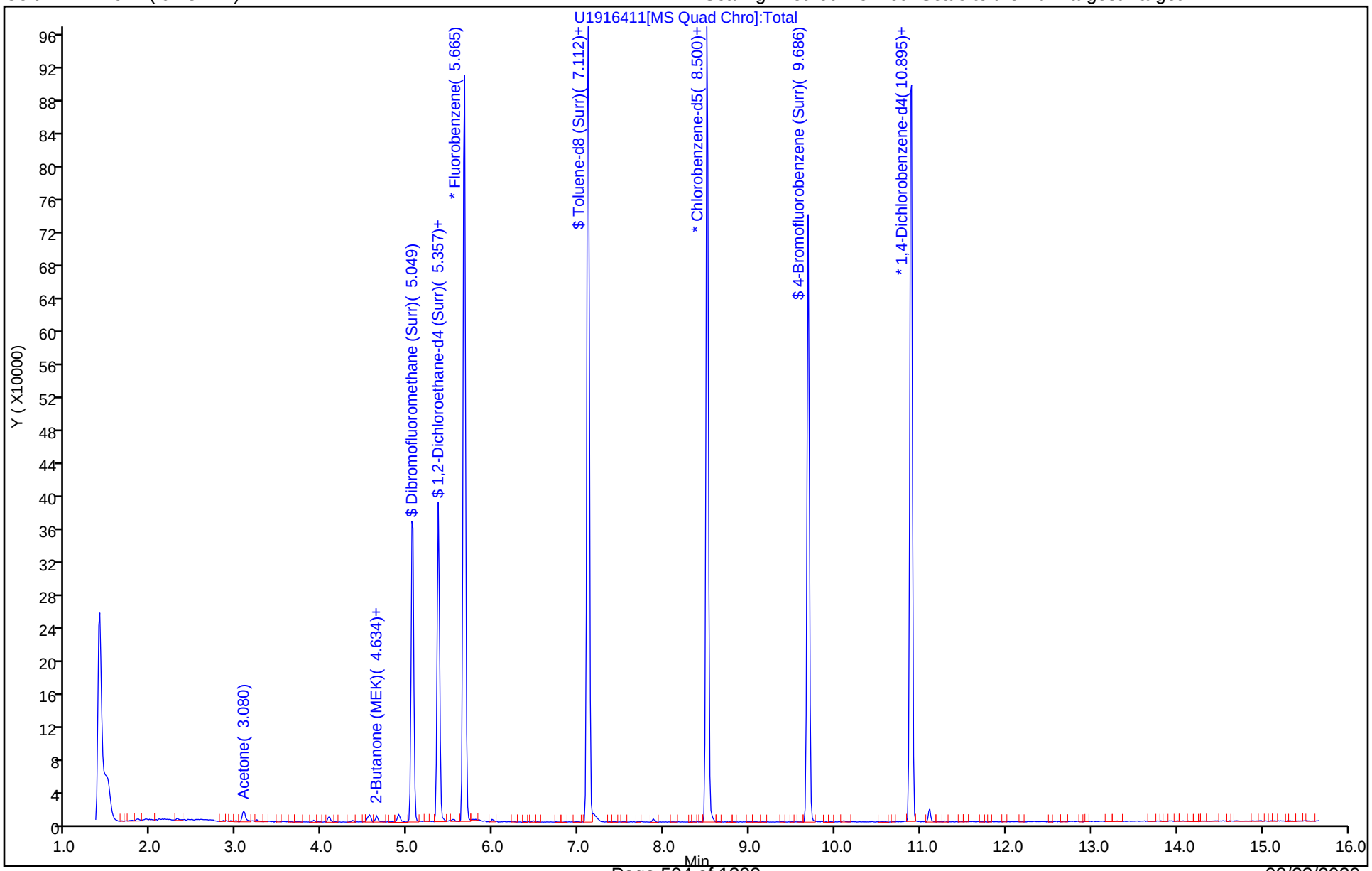
Report Date: 18-Aug-2020 14:48:48 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916411.d

Injection Date:	18-Aug-2020 01:14:00	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-8	Lab Sample ID:	240-134931-8	Worklist Smp#:	24
Client ID:	MSA-SW38D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916411.d
Lims ID: 240-134931-A-8
Client ID: MSA-SW38D-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 01:14:00 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:48:48 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:48:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	106.20
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.33
$ 6 Toluene-d8 (Surr)	20.0	20.9	104.61
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.1	95.35

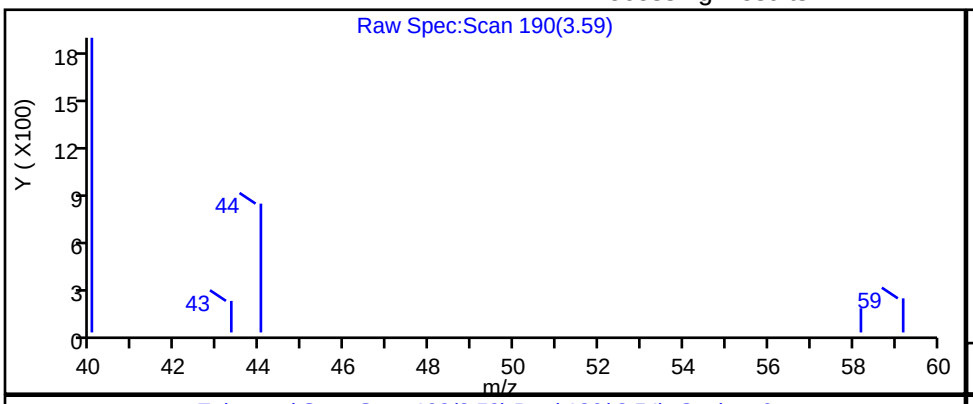
User Disabled Compound Report

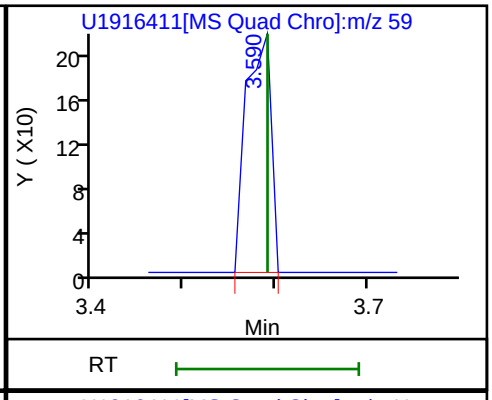
Eurofins TestAmerica, Canton

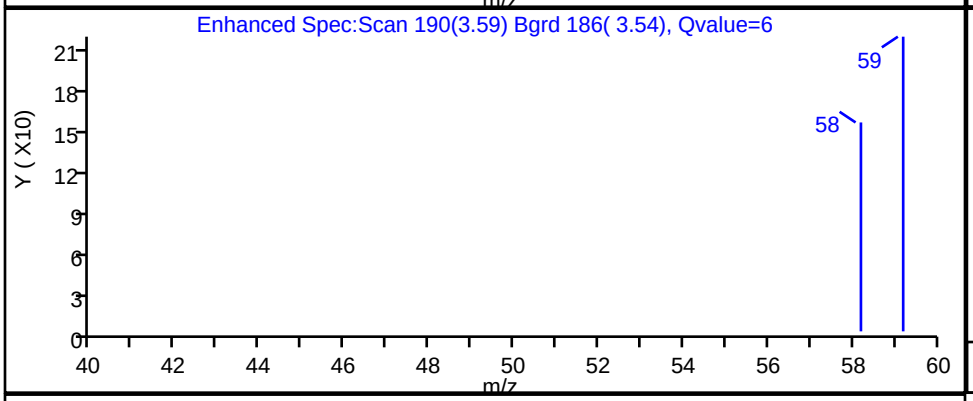
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916411.d				
Injection Date:	18-Aug-2020 01:14:00	Instrument ID:	A3UX19		
Lims ID:	240-134931-A-8	Lab Sample ID:	240-134931-8		
Client ID:	MSA-SW38D-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

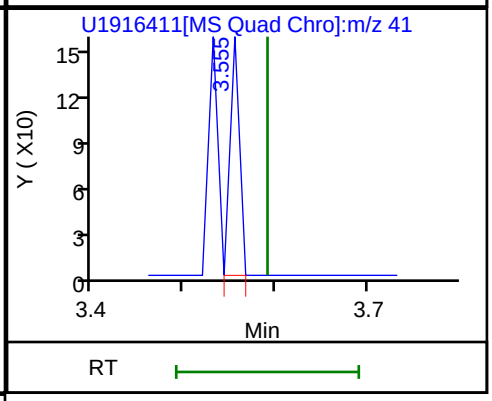
30 2-Methyl-2-propanol, CAS: 75-65-0

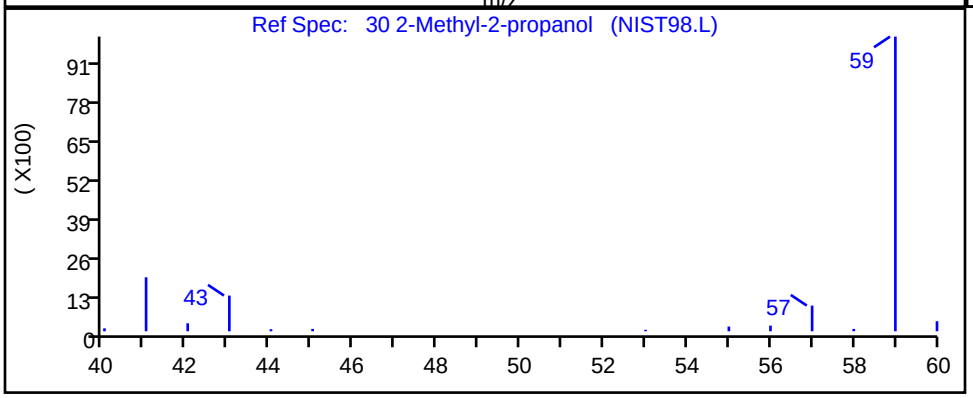
Processing Results











RT	Mass	Response	Amount
3.59	59.00	402	0.328404
3.55	41.00	110	

Reviewer: laveyt, 18-Aug-2020 14:48:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916432.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.7		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW38D-081220 Lab Sample ID: 240-134931-8

Matrix: Water Lab File ID: U1916432.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:41

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916432.d
Lims ID: 240-134931-B-8
Client ID: MSA-SW38D-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 23:34:28 ALS Bottle#: 0 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-015
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:38:07 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:38:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	889995	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	659102	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	323793	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	255140	21.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	292017	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	838379	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	269086	18.1	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	60	1621	0.1223	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	23325	6.69	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.578				ND	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.646	4.634	0.012	59	1453	0.1130	
40 2-Butanone (MEK)	72	4.658	4.634	0.024	99	1425	0.6781	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

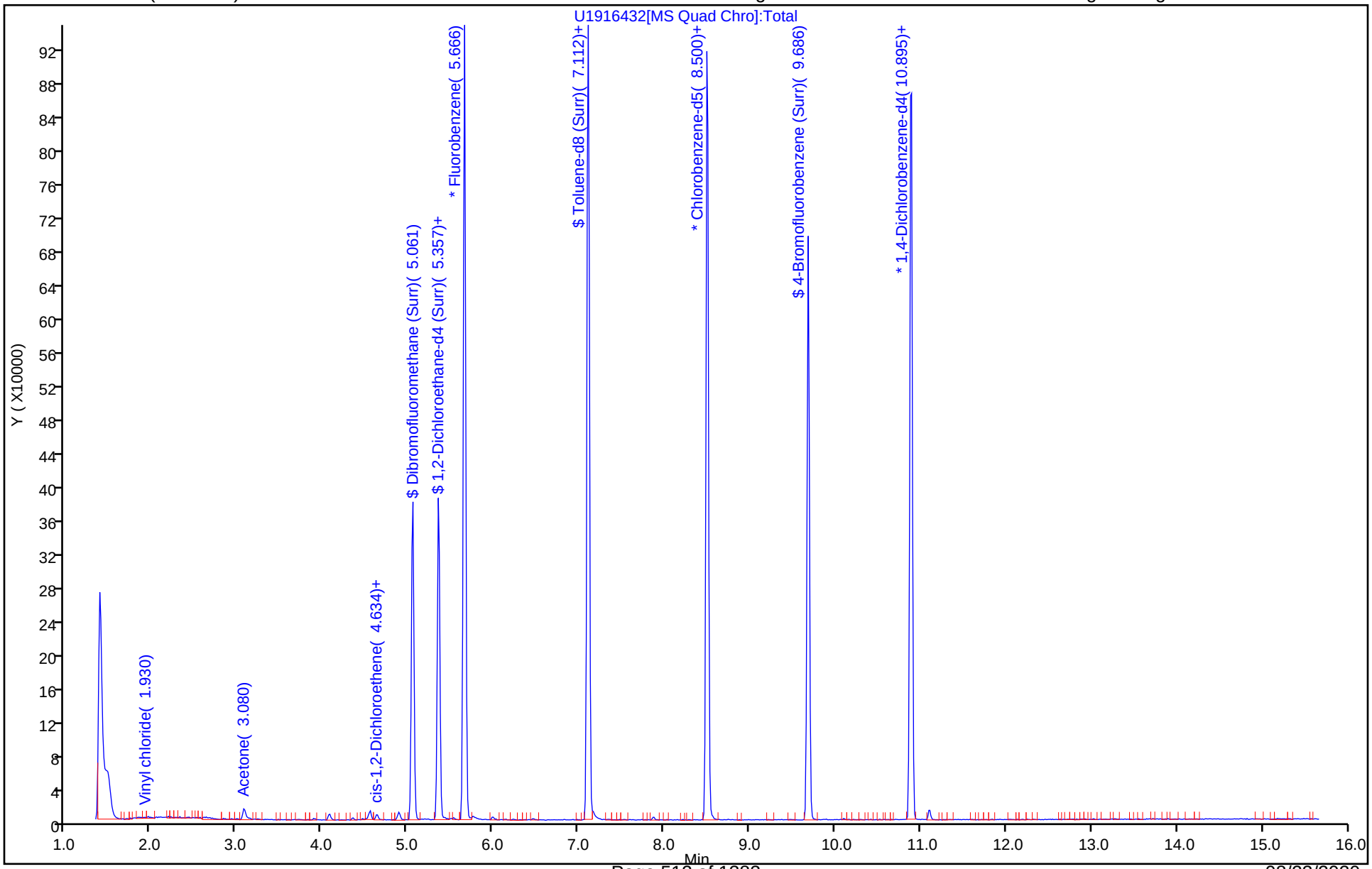
Report Date: 19-Aug-2020 13:38:34 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916432.d

Injection Date:	18-Aug-2020 23:34:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-8	Lab Sample ID:	240-134931-8	Worklist Smp#:	15
Client ID:	MSA-SW38D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916432.d
Lims ID: 240-134931-B-8
Client ID: MSA-SW38D-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 23:34:28 ALS Bottle#: 0 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-015
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:38:07 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:38:34

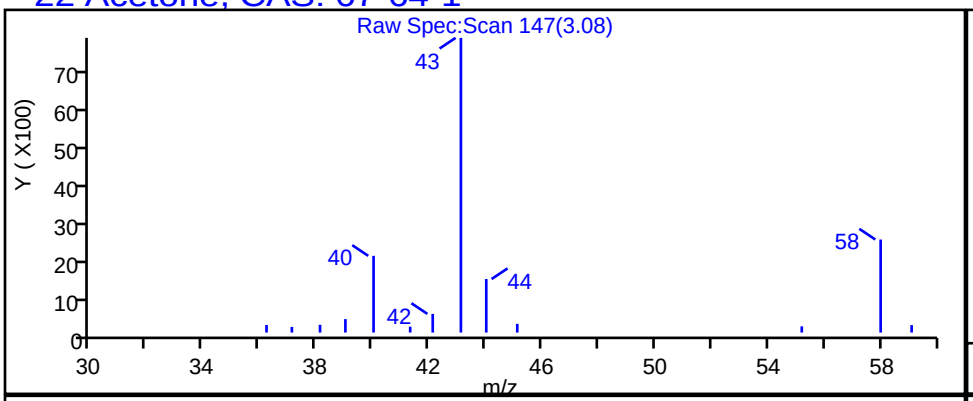
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.3	106.49
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	106.12
$ 6 Toluene-d8 (Surr)	20.0	21.2	106.06
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.1	90.47

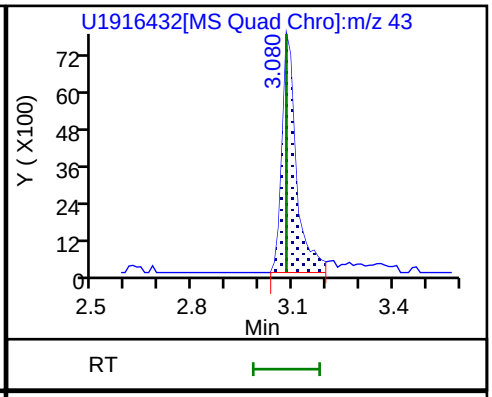
Report Date: 19-Aug-2020 13:38:34 Chrom Revision: 2.3 17-Aug-2020 20:42:08

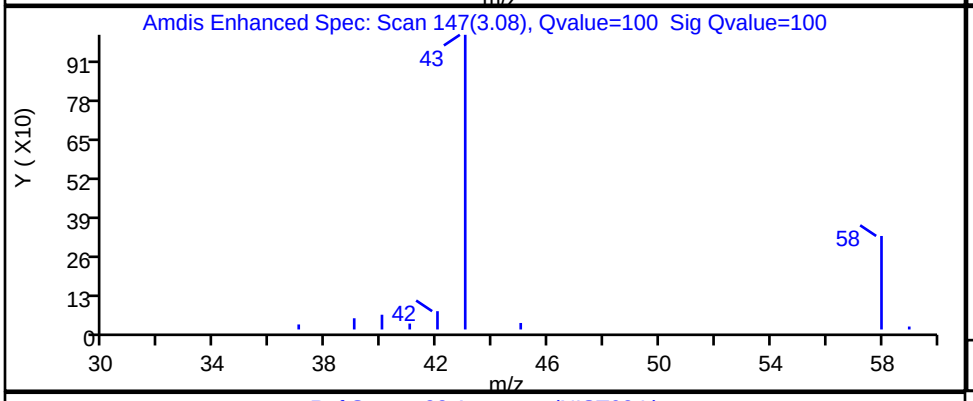
Eurofins TestAmerica, Canton

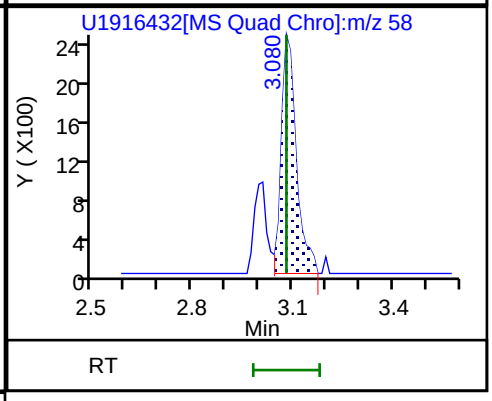
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916432.d				
Injection Date:	18-Aug-2020 23:34:28	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-8	Lab Sample ID:	240-134931-8		
Client ID:	MSA-SW38D-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

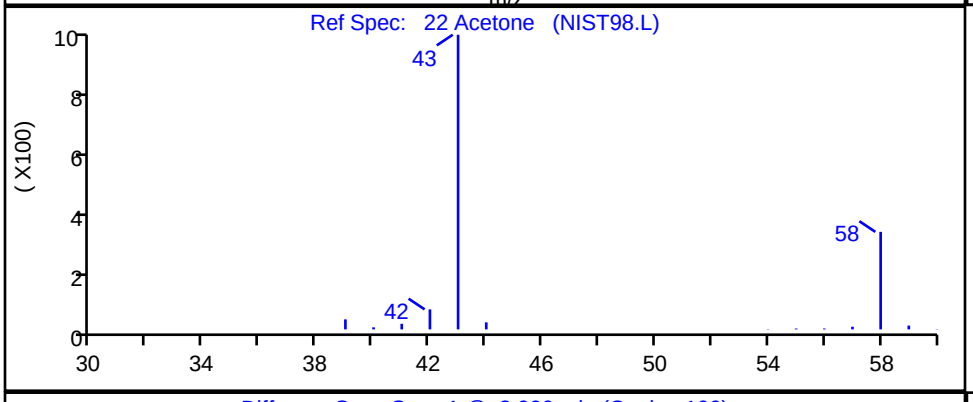
22 Acetone, CAS: 67-64-1

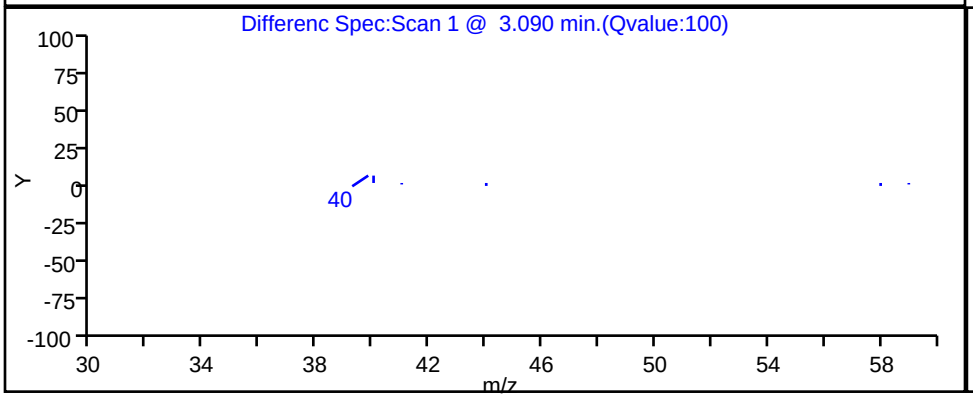


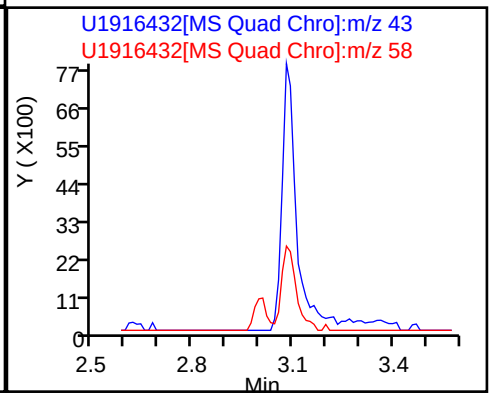












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916412.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:36

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916412.d
Lims ID: 240-134931-B-9
Client ID: MSA-SW40A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 01:36:37 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:48:48 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:49:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	905265	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	679888	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	343518	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	251598	20.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	97	287605	20.6	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	846533	20.8	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	286990	18.7	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.081	3.080	0.001	100	39747	11.2	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.579	3.590	-0.011	7	665	0.5425	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	99	2407	1.13	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	53	2022	0.1545	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	94	2181	0.1525	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

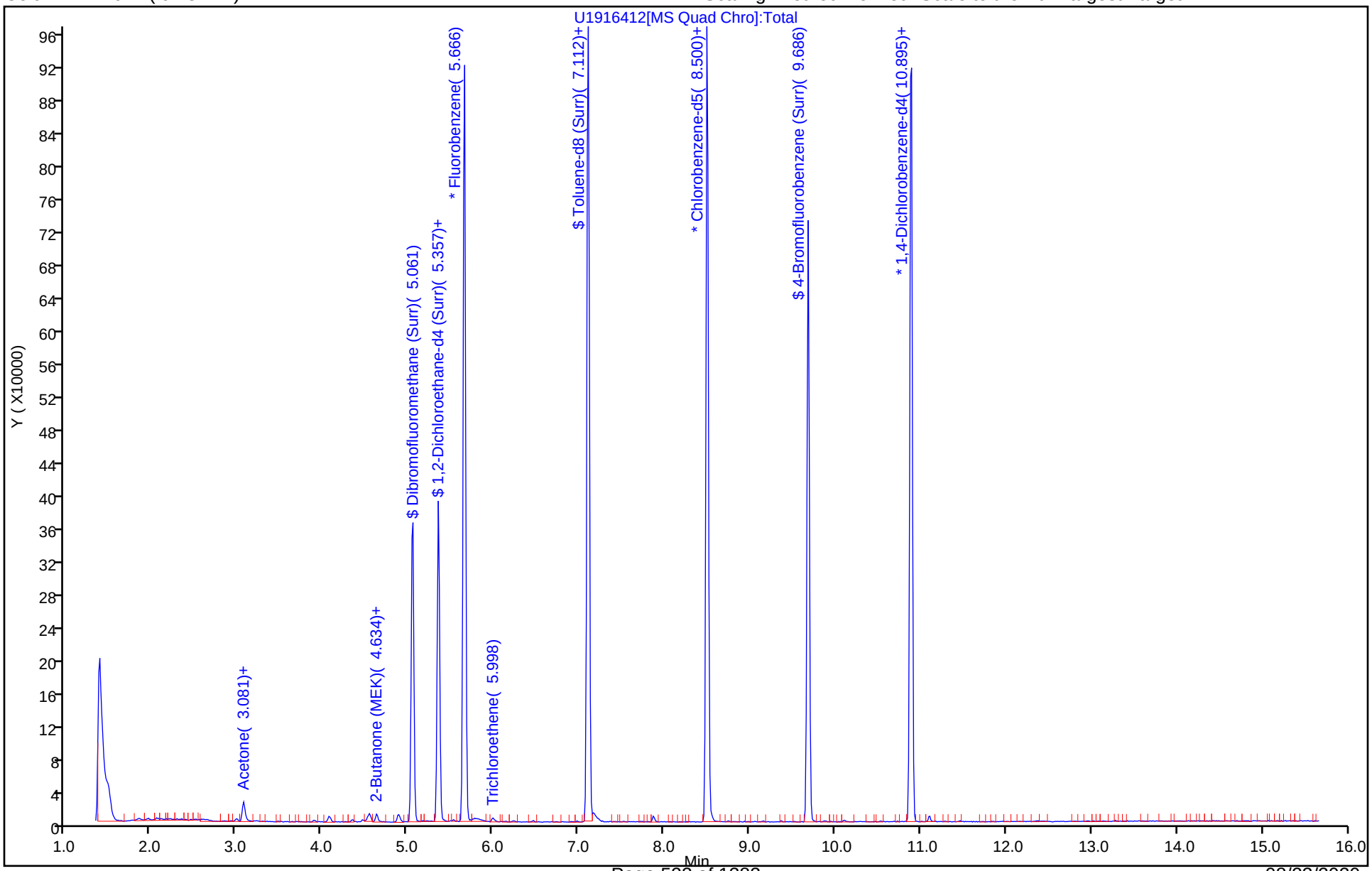
Report Date: 18-Aug-2020 14:49:22 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916412.d

Injection Date:	18-Aug-2020 01:36:37	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-9	Lab Sample ID:	240-134931-9	Worklist Smp#:	25
Client ID:	MSA-SW40A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916412.d
Lims ID: 240-134931-B-9
Client ID: MSA-SW40A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 01:36:37 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:48:48 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:49:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.6	103.24
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.6	102.75
$ 6 Toluene-d8 (Surr)	20.0	20.8	103.82
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916433.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	10		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40A-081220 Lab Sample ID: 240-134931-9

Matrix: Water Lab File ID: U1916433.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:51

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 23:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916433.d
Lims ID: 240-134931-A-9
Client ID: MSA-SW40A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 23:56:43 ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-016
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:39:06 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:39:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	898504	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	667755	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	330744	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	248422	20.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	283789	20.4	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	820415	20.5	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	270969	18.0	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	36757	10.4	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.578	0.012	1	577	0.4743	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	57	1804	0.1389	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	98	2457	1.16	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	87	1701	0.1198	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

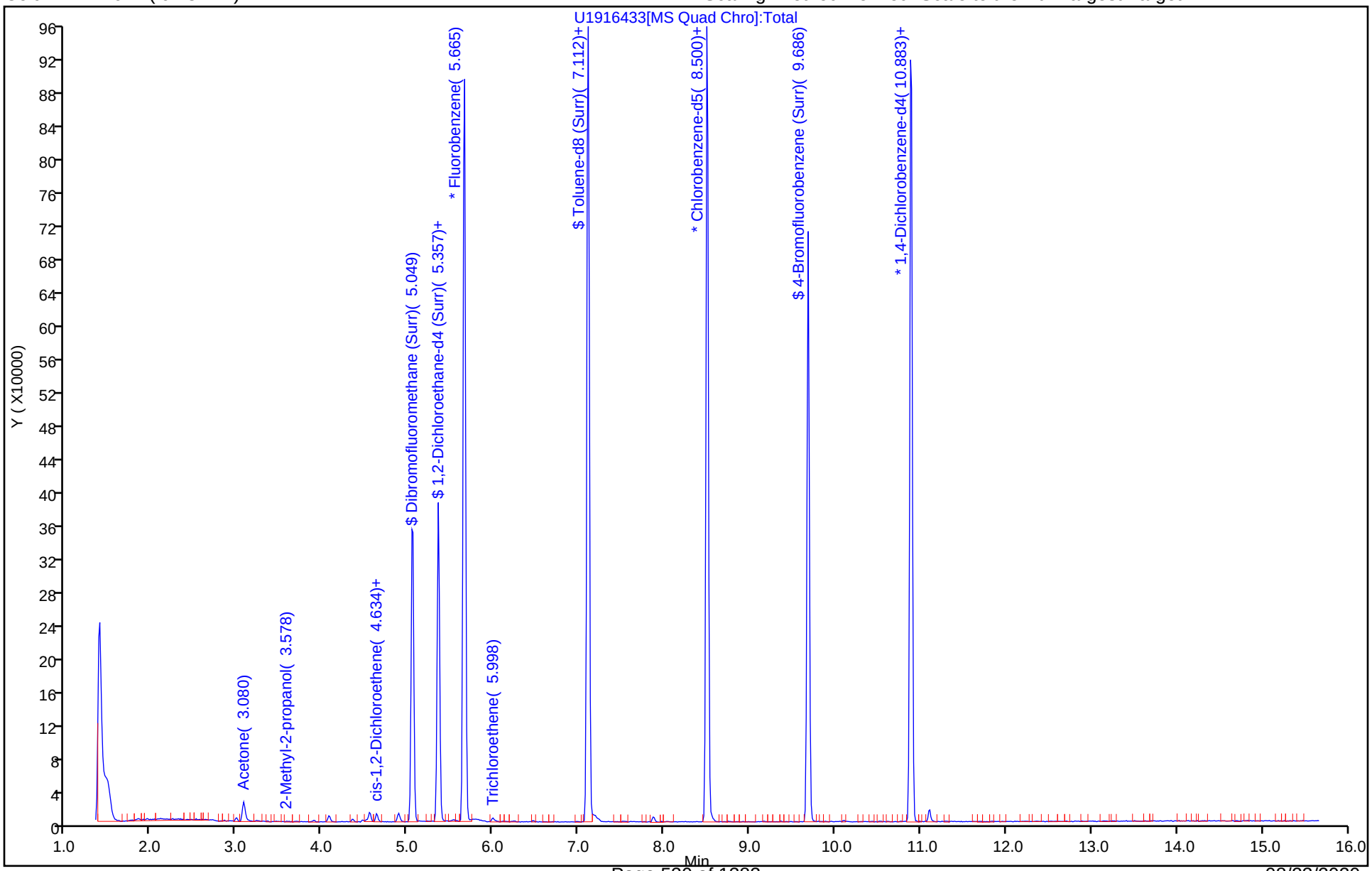
Report Date: 19-Aug-2020 13:39:06 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916433.d

Injection Date:	18-Aug-2020 23:56:43	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-9	Lab Sample ID:	240-134931-9	Worklist Smp#:	16
Client ID:	MSA-SW40A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916433.d
Lims ID: 240-134931-A-9
Client ID: MSA-SW40A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 23:56:43 ALS Bottle#: 0 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-016
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:39:06 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

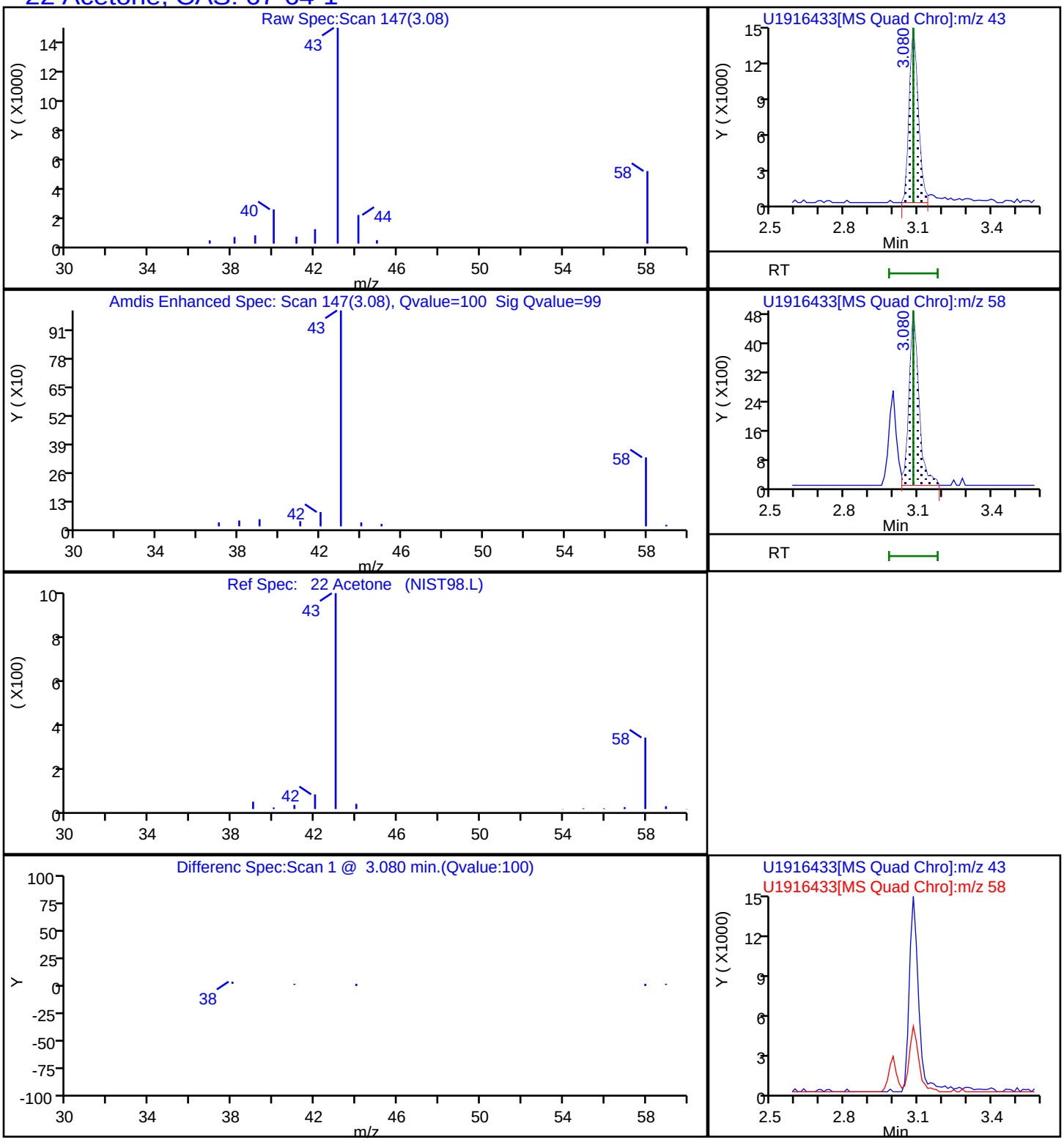
First Level Reviewer: laveyt Date: 19-Aug-2020 13:39:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.5	102.71
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.4	102.15
$ 6 Toluene-d8 (Surr)	20.0	20.5	102.45
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.0	89.92

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916433.d		
Injection Date:	18-Aug-2020 23:56:43	Instrument ID:	A3UX19
Lims ID:	240-134931-A-9	Lab Sample ID:	240-134931-9
Client ID:	MSA-SW40A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

22 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916413.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 01:59

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916413.d
Lims ID: 240-134931-B-10
Client ID: MSA-SW40B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 01:59:01 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-026
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:49:59 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:49:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	901695	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	663538	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	337329	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	93	259394	21.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	290109	20.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	840399	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	280103	18.7	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.081	3.080	0.001	100	24502	6.93	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.579	3.590	-0.011	32	423	0.3465	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1508	0.7082	
41 cis-1,2-Dichloroethene	96		4.634				ND	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

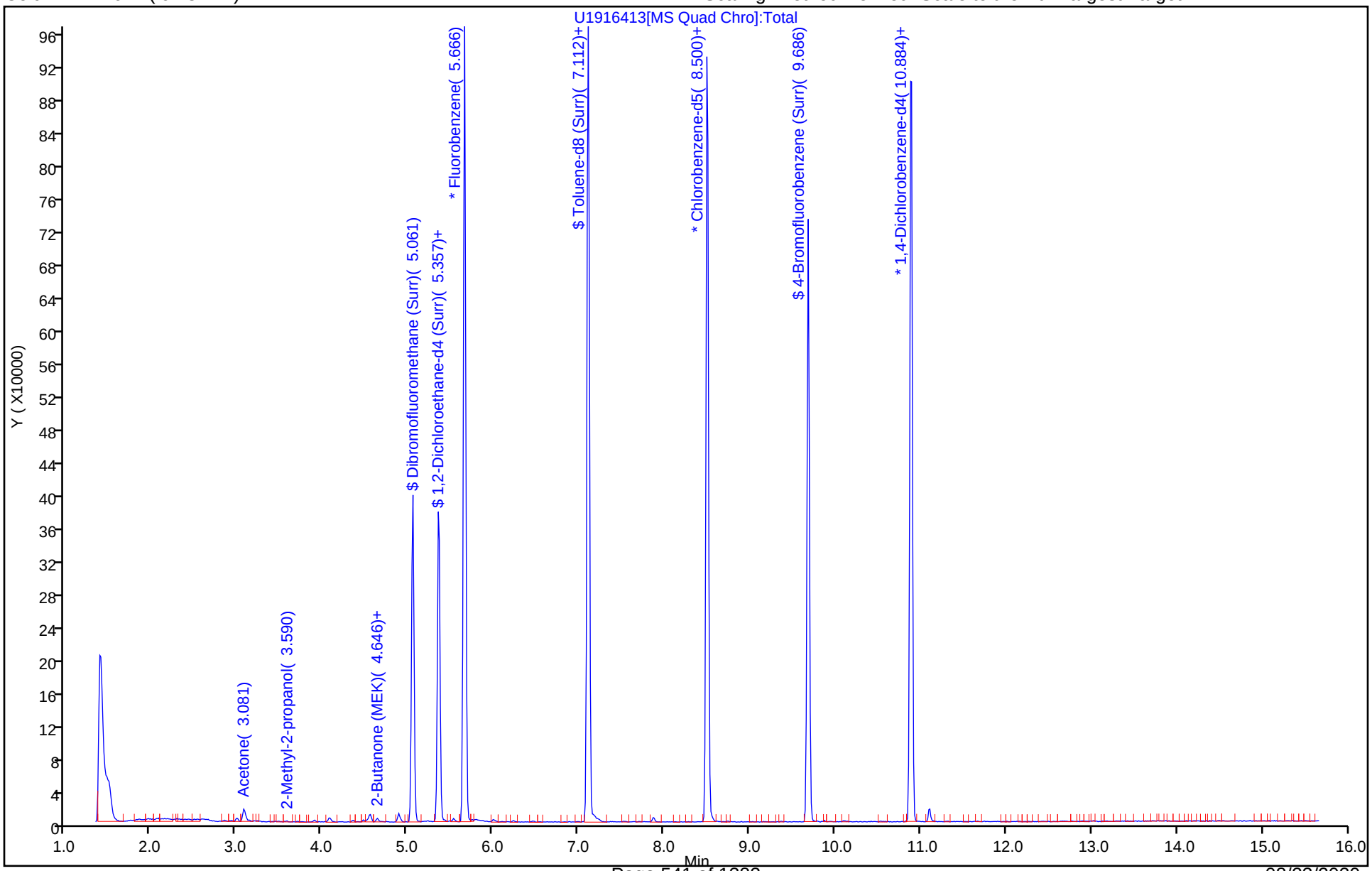
Report Date: 18-Aug-2020 14:50:00 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916413.d

Injection Date:	18-Aug-2020 01:59:01	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-10	Lab Sample ID:	240-134931-10	Worklist Smp#:	26
Client ID:	MSA-SW40B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916413.d
Lims ID: 240-134931-B-10
Client ID: MSA-SW40B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 01:59:01 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-026
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:49:59 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:49:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.4	106.86
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	104.06
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.61
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.54

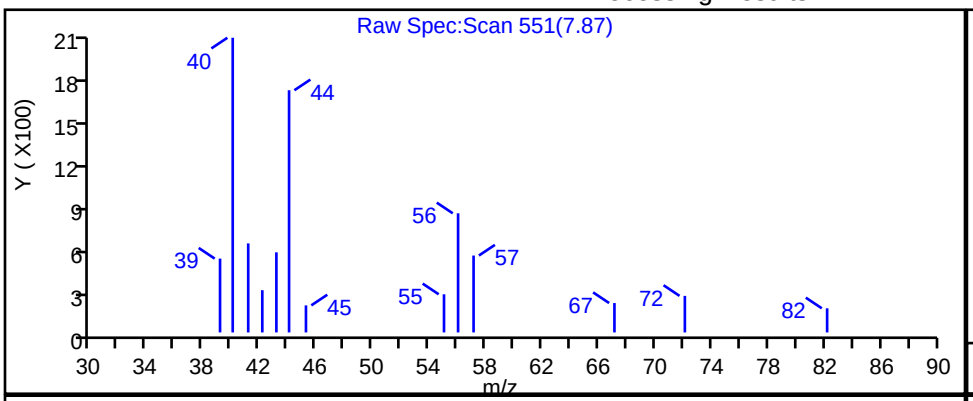
User Disabled Compound Report

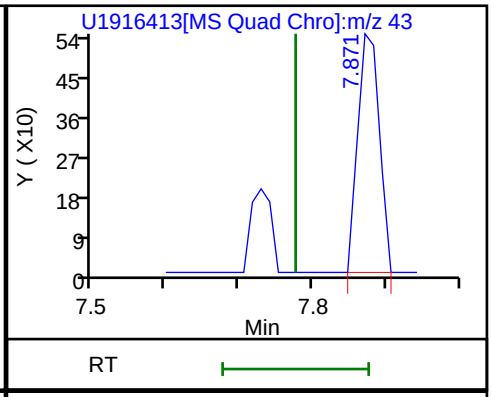
Eurofins TestAmerica, Canton

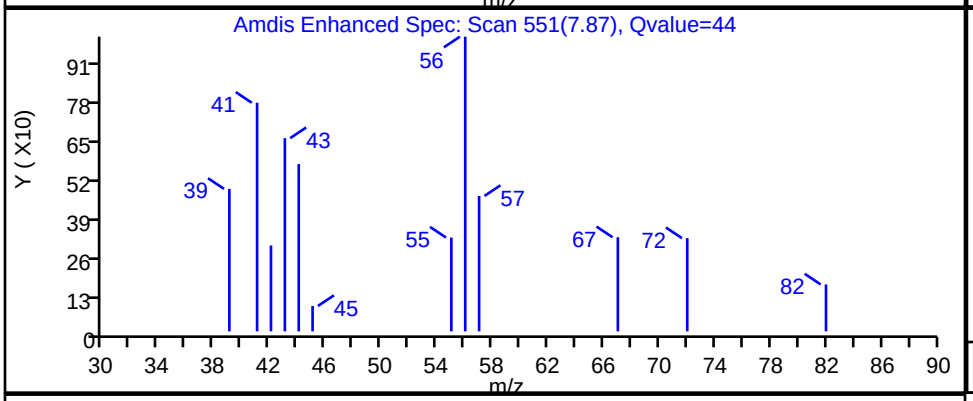
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916413.d				
Injection Date:	18-Aug-2020 01:59:01	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-10	Lab Sample ID:	240-134931-10		
Client ID:	MSA-SW40B-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

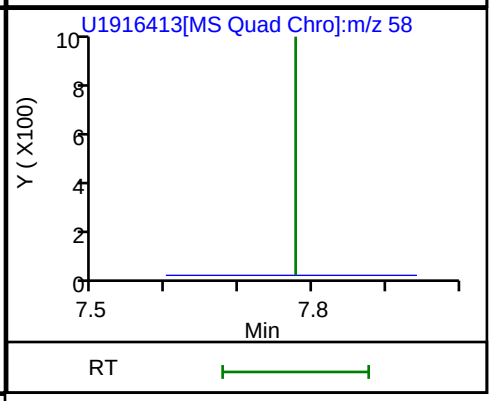
77 2-Hexanone, CAS: 591-78-6

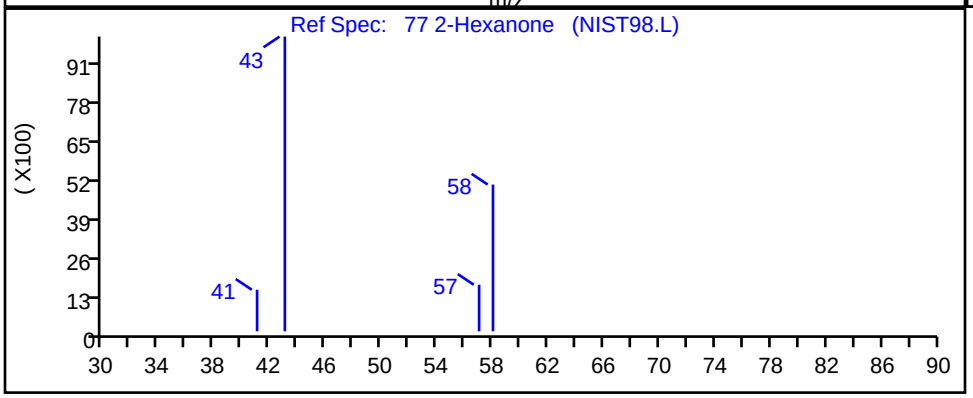
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1123	0.107494
7.78	58.00	0	

Reviewer: laveyt, 18-Aug-2020 14:49:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916434.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	7.2		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	89		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40B-081220 Lab Sample ID: 240-134931-10

Matrix: Water Lab File ID: U1916434.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:53

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916434.d
Lims ID: 240-134931-A-10
Client ID: MSA-SW40B-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 00:18:57 ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-017
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:39:06 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:39:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	870199	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	640076	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	321111	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	245091	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	275146	20.5	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	792284	20.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	257430	17.8	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.092	3.080	0.012	99	24725	7.25	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.579	3.578	0.001	1	233	0.1977	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1377	0.6701	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

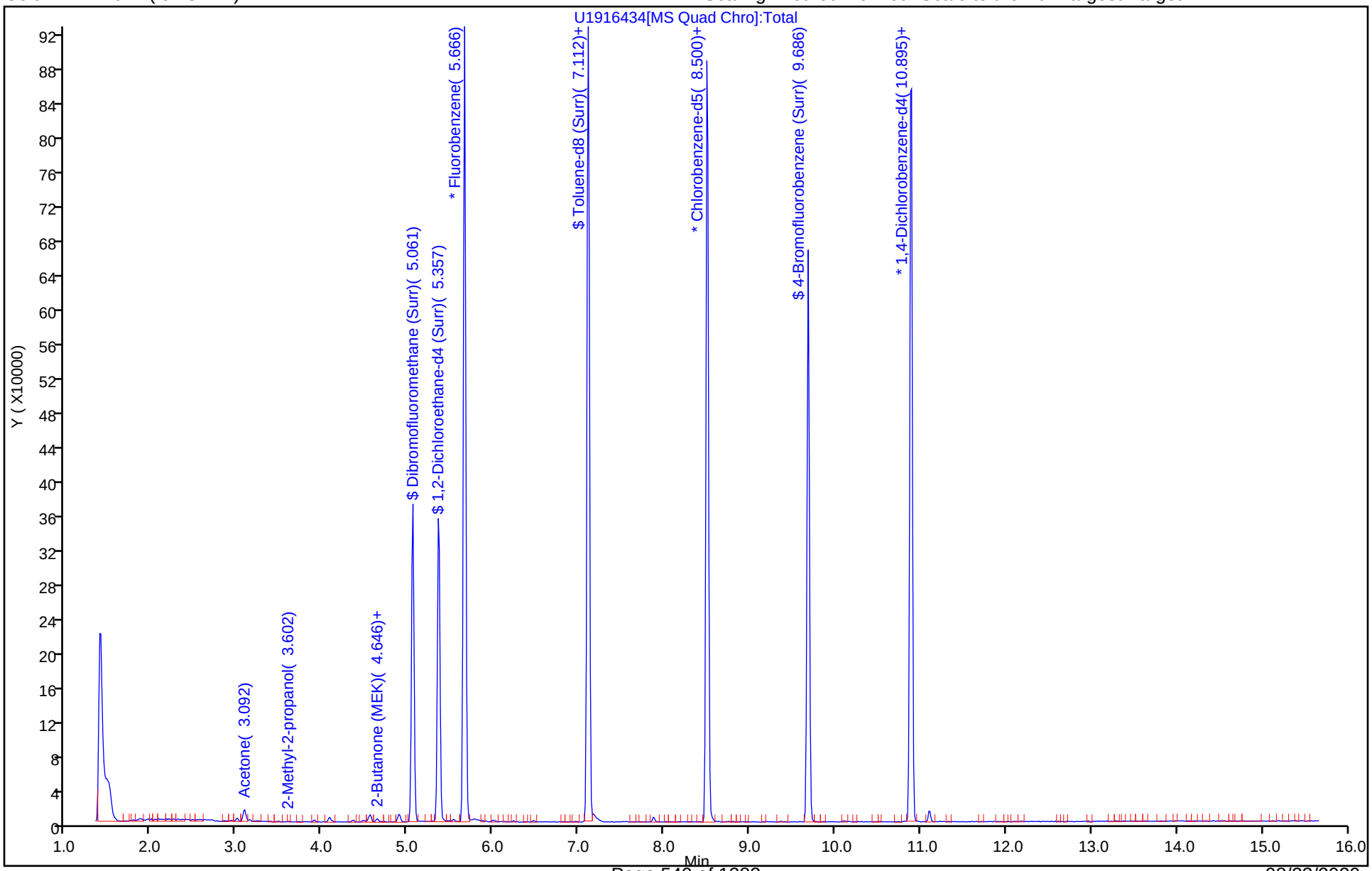
Report Date: 19-Aug-2020 13:39:29 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916434.d

Injection Date:	19-Aug-2020 00:18:57	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-10	Lab Sample ID:	240-134931-10	Worklist Smp#:	17
Client ID:	MSA-SW40B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916434.d
Lims ID: 240-134931-A-10
Client ID: MSA-SW40B-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 00:18:57 ALS Bottle#: 0 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-017
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:39:06 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

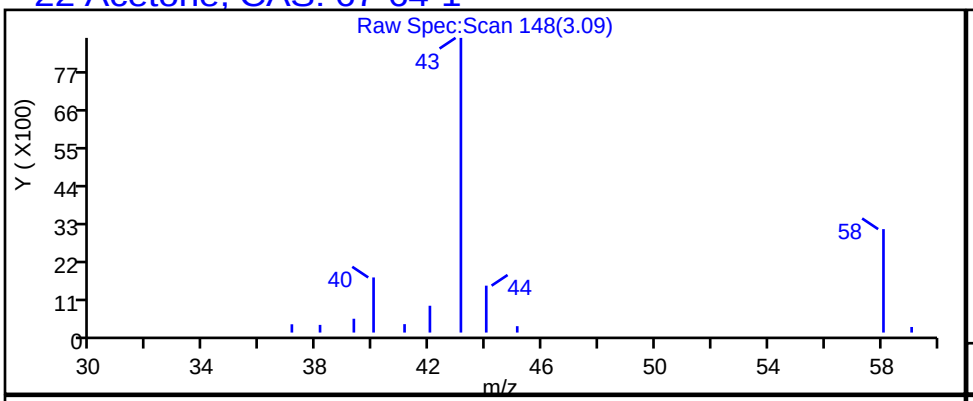
First Level Reviewer: laveyt Date: 19-Aug-2020 13:39:28

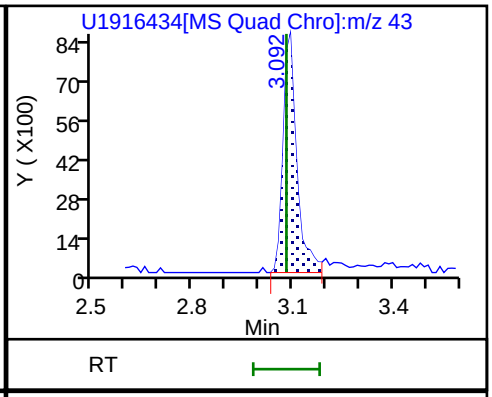
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.62
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.5	102.26
$ 6 Toluene-d8 (Surr)	20.0	20.6	103.21
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.8	89.12

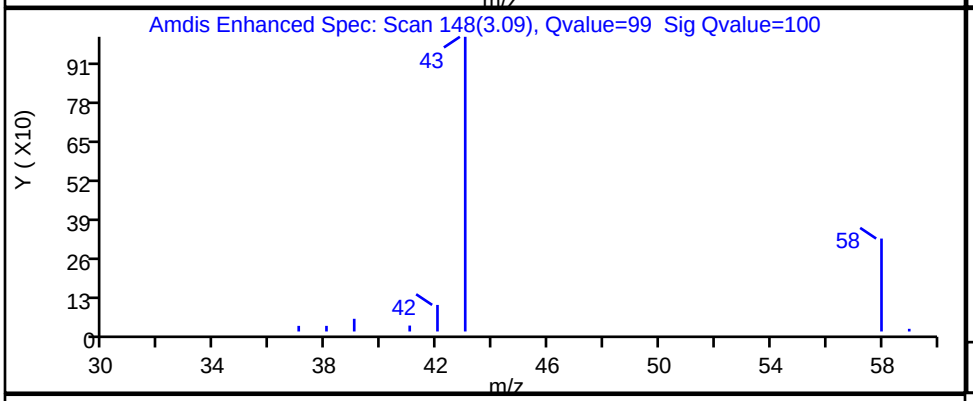
Eurofins TestAmerica, Canton

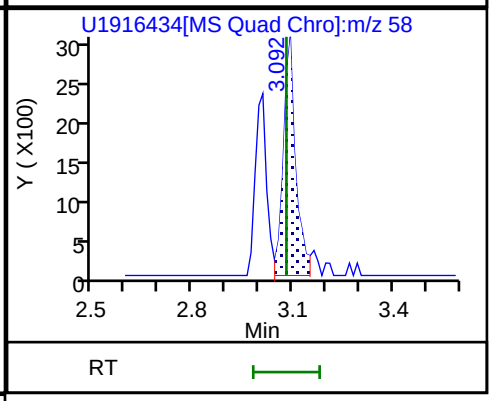
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916434.d		
Injection Date:	19-Aug-2020 00:18:57	Instrument ID:	A3UX19
Lims ID:	240-134931-A-10	Lab Sample ID:	240-134931-10
Client ID:	MSA-SW40B-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

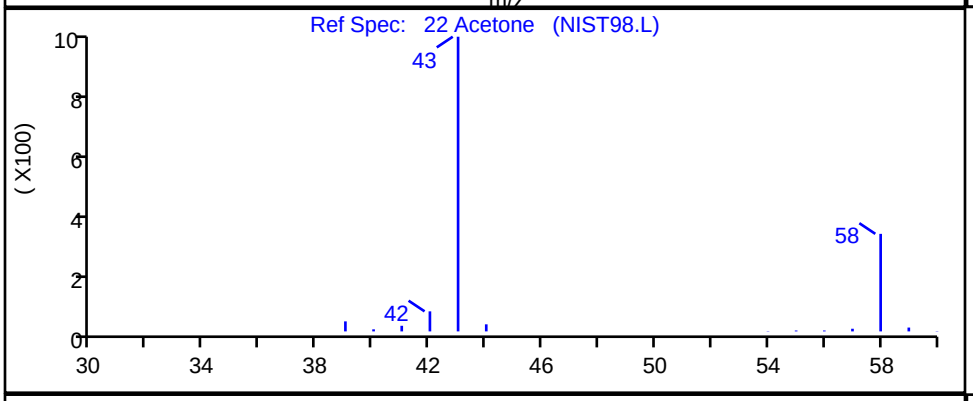
22 Acetone, CAS: 67-64-1

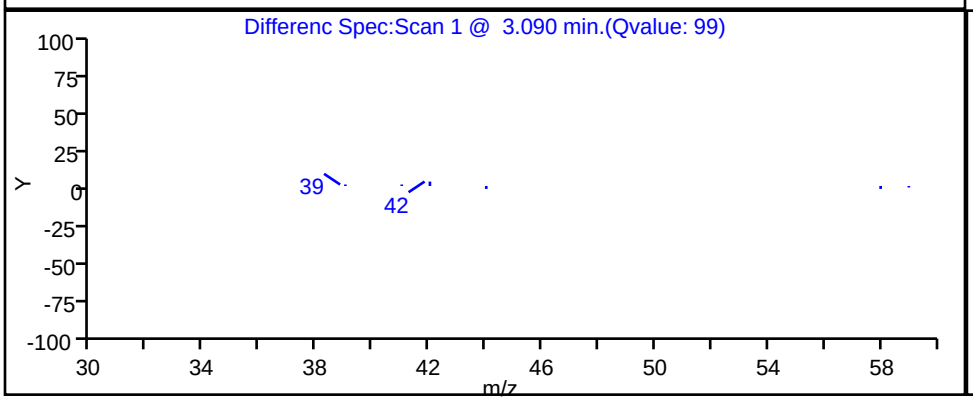


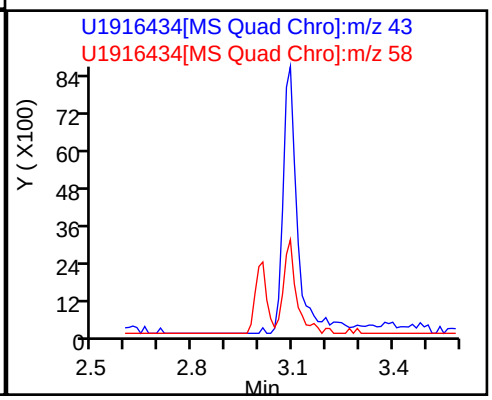












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	8.0		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40C-081220 Lab Sample ID: 240-134931-11

Matrix: Water Lab File ID: U1916441.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:56

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916441.d
Lims ID: 240-134931-A-11
Client ID: MSA-SW40C-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 02:55:27 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:43:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	884983	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	657806	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	328137	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	250505	21.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	287966	21.0	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	828880	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	278973	18.8	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.068	3.080	-0.012	99	27855	8.03	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	7	404	0.3371	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1360	0.6508	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

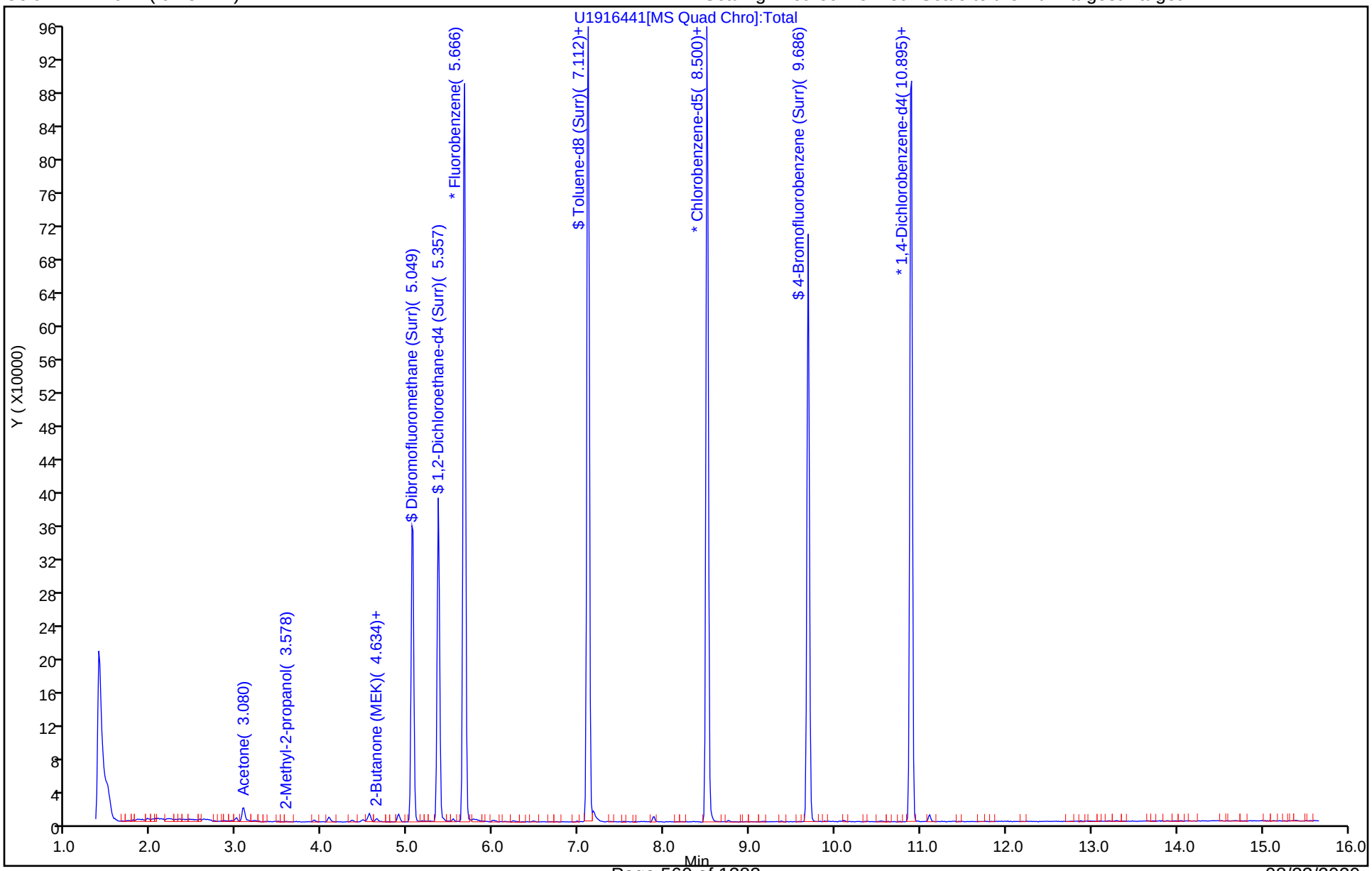
Report Date: 19-Aug-2020 13:43:34 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916441.d

Injection Date:	19-Aug-2020 02:55:27	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-11	Lab Sample ID:	240-134931-11	Worklist Smp#:	24
Client ID:	MSA-SW40C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916441.d
Lims ID: 240-134931-A-11
Client ID: MSA-SW40C-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 02:55:27 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:43:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	105.15
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.0	105.24
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.07
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.8	93.97

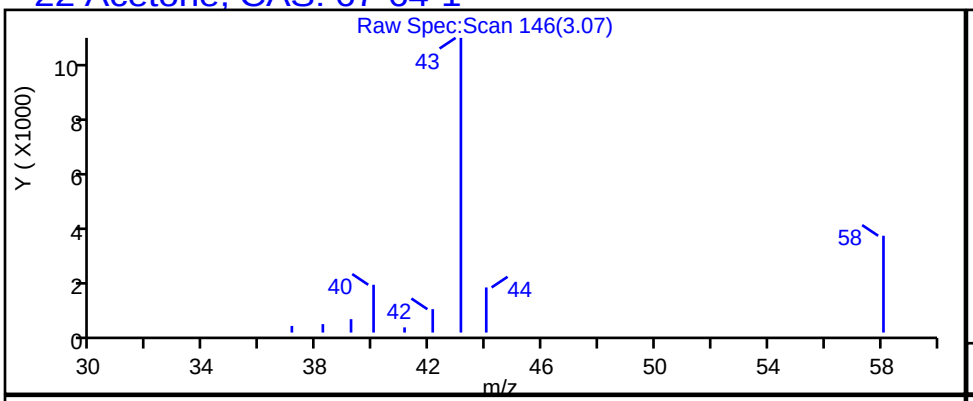
Report Date: 19-Aug-2020 13:43:34 Chrom Revision: 2.3 17-Aug-2020 20:42:08

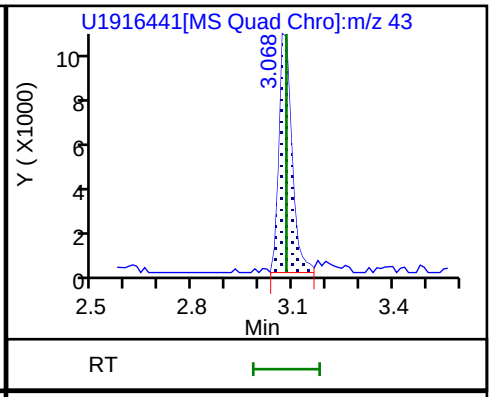
Eurofins TestAmerica, Canton

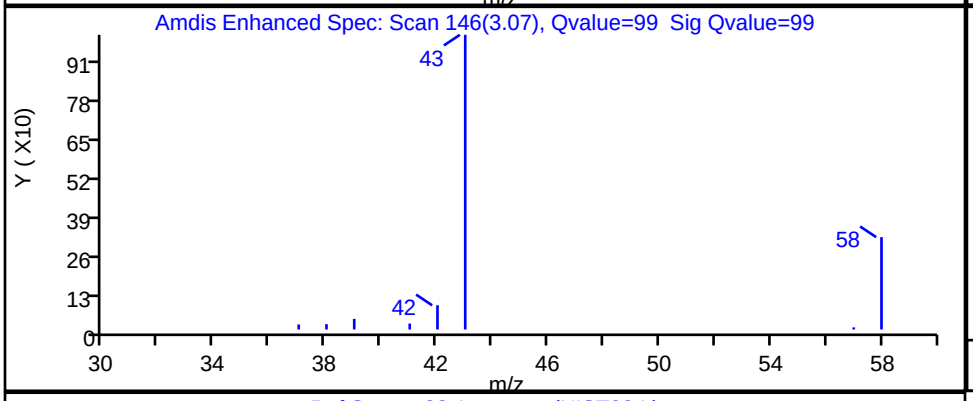
Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916441.d

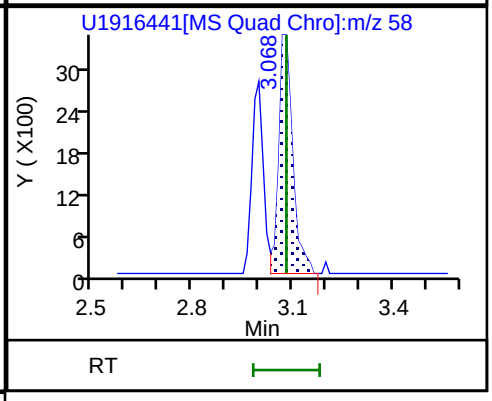
Injection Date:	19-Aug-2020 02:55:27	Instrument ID:	A3UX19
Lims ID:	240-134931-A-11	Lab Sample ID:	240-134931-11
Client ID:	MSA-SW40C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

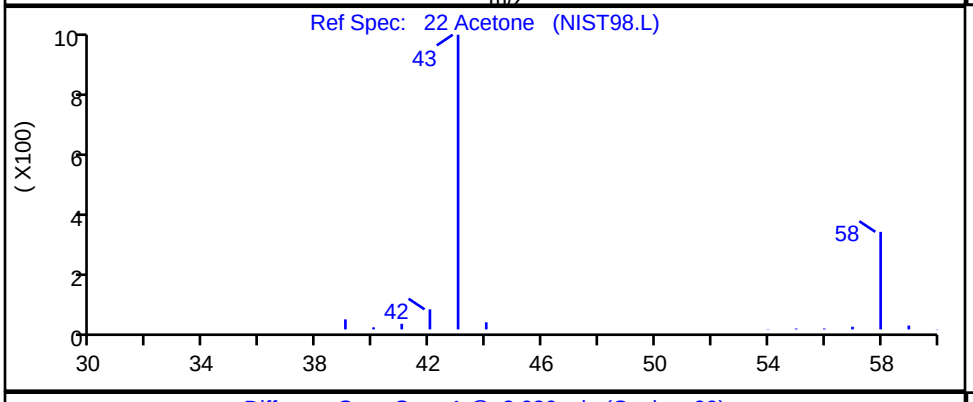
22 Acetone, CAS: 67-64-1

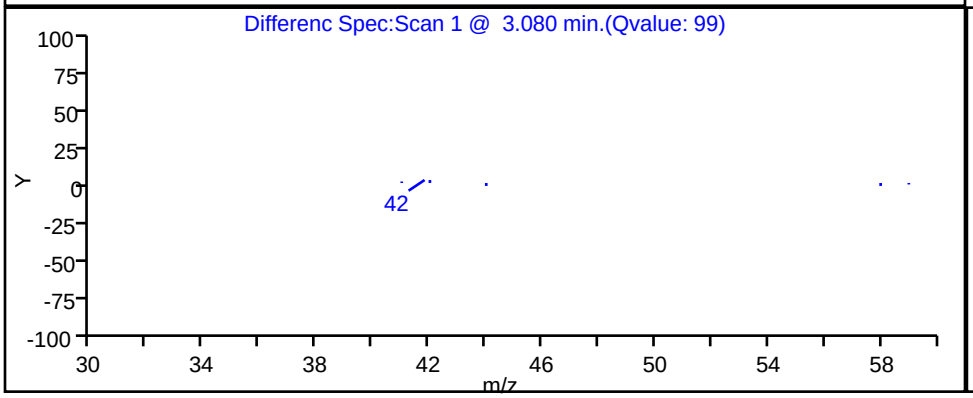


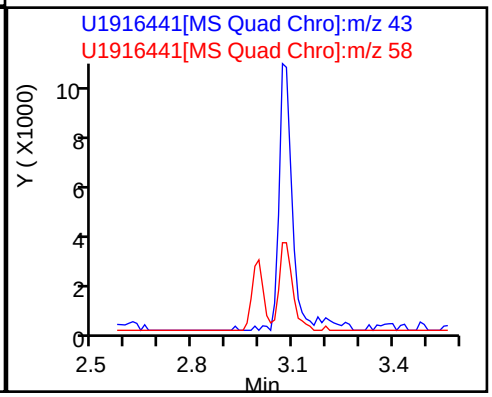












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.7		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW40D-081220 Lab Sample ID: 240-134931-12

Matrix: Water Lab File ID: U1916442.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:09

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:18

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916442.d
Lims ID: 240-134931-A-12
Client ID: MSA-SW40D-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 03:18:04 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:44:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	901237	20.0	
* 2 Chlorobenzene-d5	117	8.499	8.500	-0.001	85	680557	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	343999	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.060	5.049	0.011	93	253365	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	289005	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	827911	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	282241	18.4	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	98	20218	5.72	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	24	478	0.3917	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.645	4.634	0.011	98	1000	0.4699	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

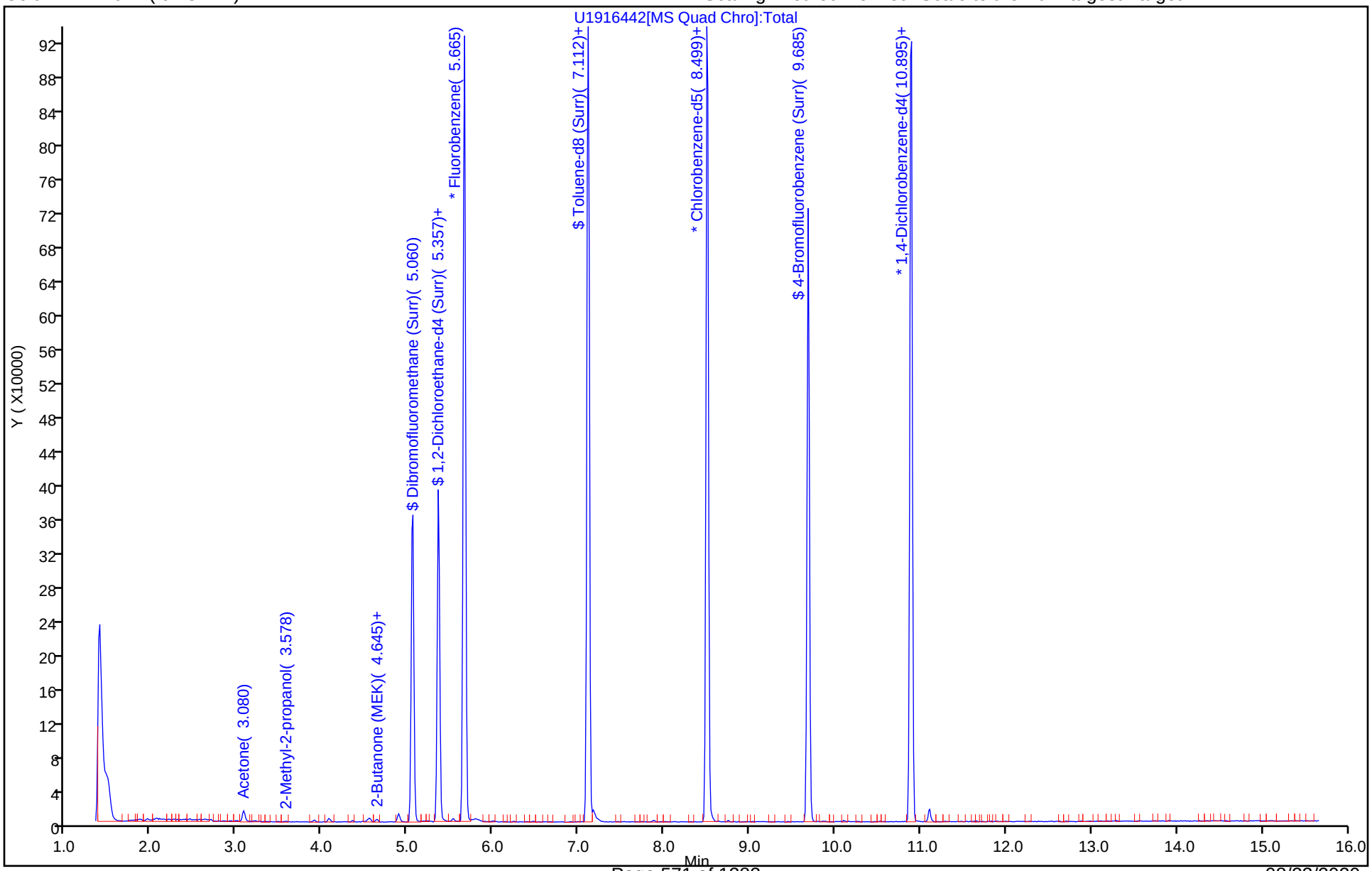
Report Date: 19-Aug-2020 13:44:03 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916442.d

Injection Date:	19-Aug-2020 03:18:04	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-12	Lab Sample ID:	240-134931-12	Worklist Smp#:	25
Client ID:	MSA-SW40D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916442.d
Lims ID: 240-134931-A-12
Client ID: MSA-SW40D-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 03:18:04 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

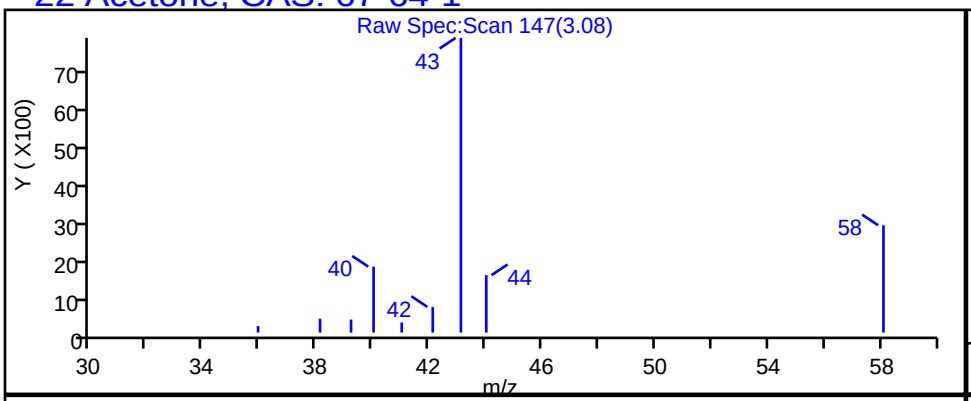
First Level Reviewer: laveyt Date: 19-Aug-2020 13:44:01

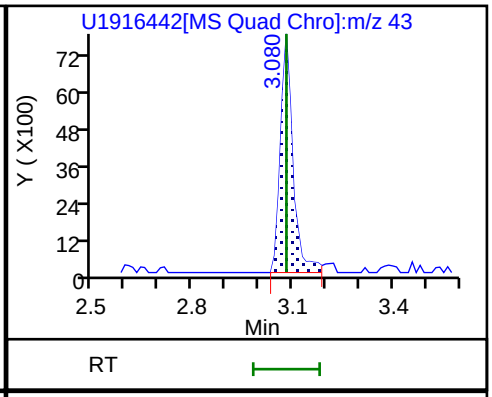
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.43
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.71
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.44
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.4	91.90

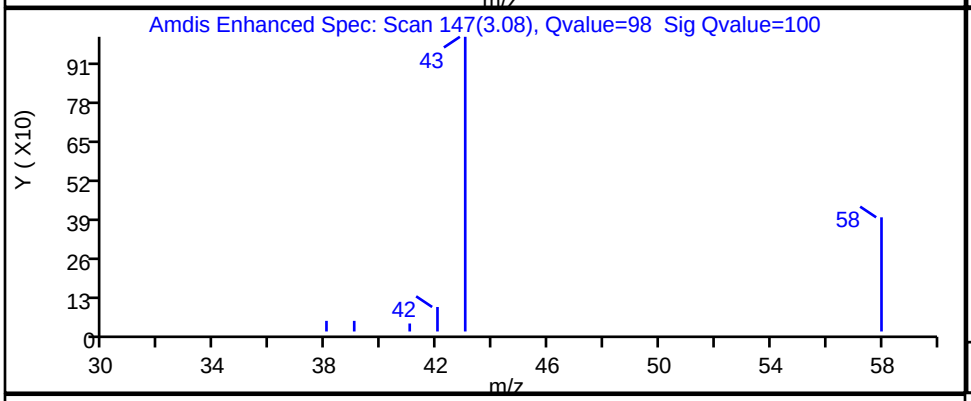
Eurofins TestAmerica, Canton

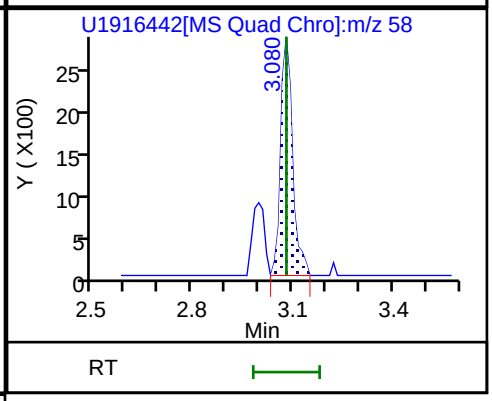
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916442.d		
Injection Date:	19-Aug-2020 03:18:04	Instrument ID:	A3UX19
Lims ID:	240-134931-A-12	Lab Sample ID:	240-134931-12
Client ID:	MSA-SW40D-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

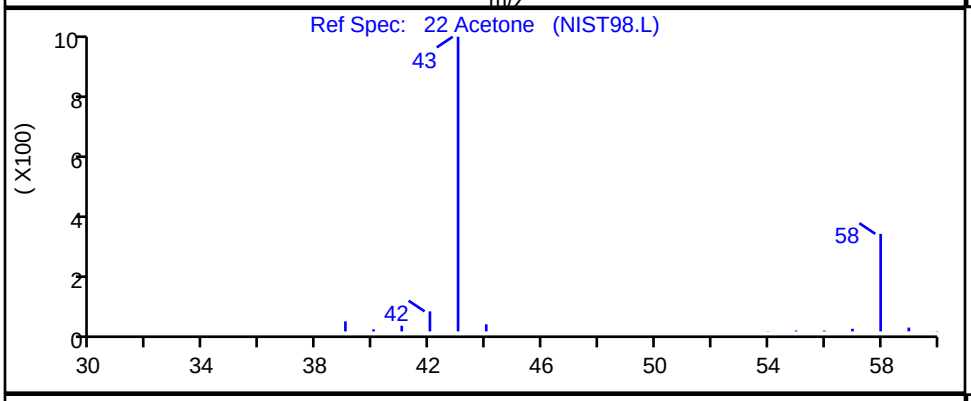
22 Acetone, CAS: 67-64-1

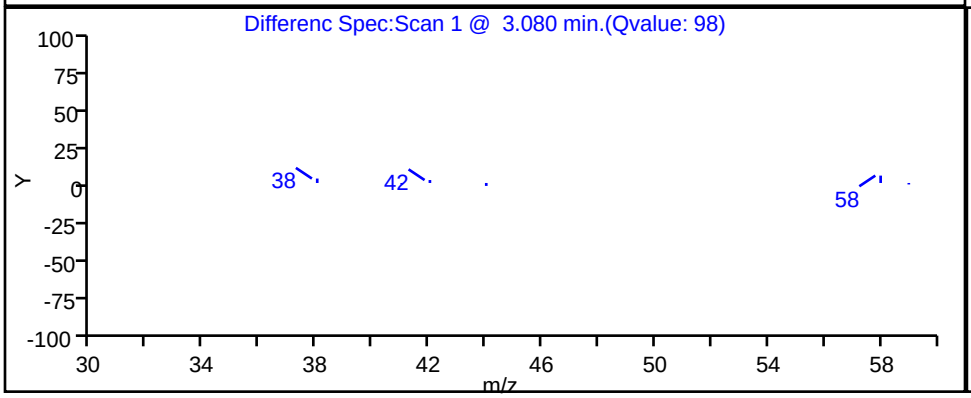


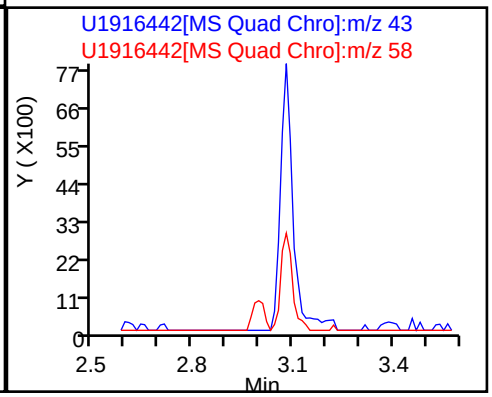












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	9.2		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	89		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41A-081220 Lab Sample ID: 240-134931-13

Matrix: Water Lab File ID: U1916443.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:17

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 03:40

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916443.d
Lims ID: 240-134931-B-13
Client ID: MSA-SW41A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 03:40:18 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-026
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:44:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	877451	20.0	
* 2 Chlorobenzene-d5	117	8.512	8.500	0.012	85	650000	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	315627	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	245361	20.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	97	280680	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	805671	20.7	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	260598	17.8	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	18	1492	0.1141	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	31559	9.17	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	22	374	0.3148	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.646	4.634	0.012	64	2352	0.1855	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	2456	1.19	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	93	2159	0.1557	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

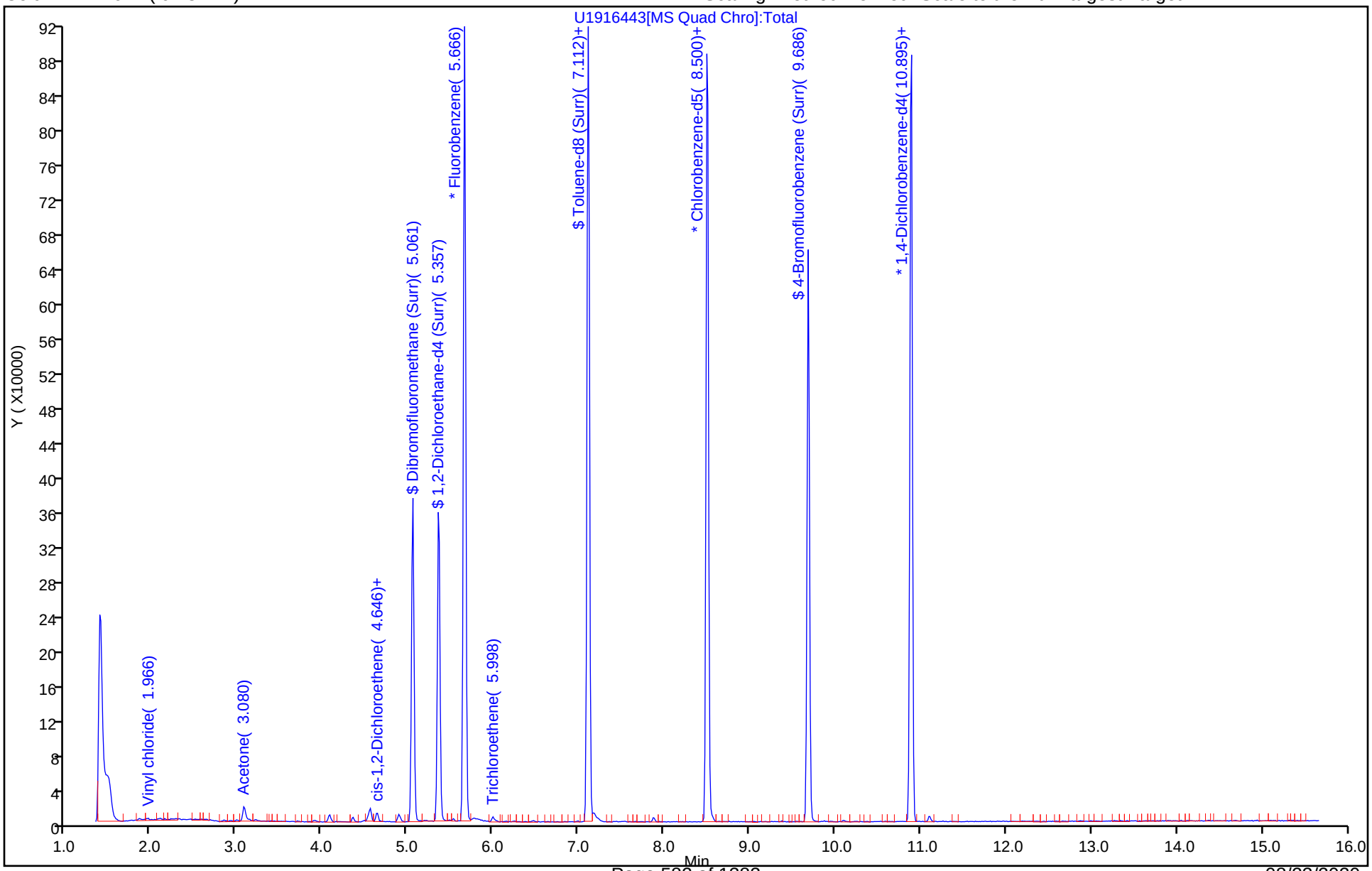
Report Date: 19-Aug-2020 13:44:36 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916443.d

Injection Date:	19-Aug-2020 03:40:18	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-13	Lab Sample ID:	240-134931-13	Worklist Smp#:	26
Client ID:	MSA-SW41A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916443.d
Lims ID: 240-134931-B-13
Client ID: MSA-SW41A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 03:40:18 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-026
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

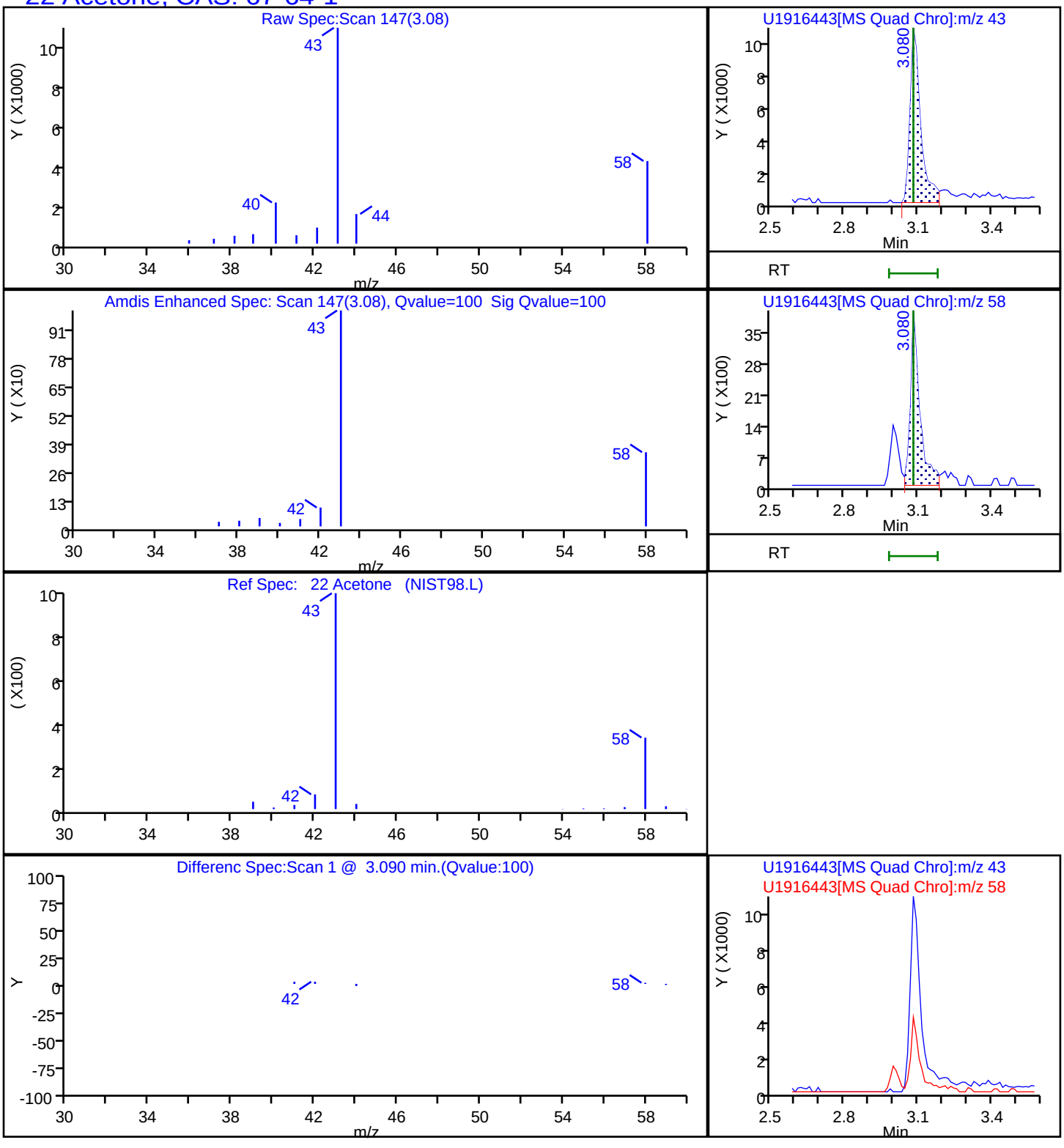
First Level Reviewer: laveyt Date: 19-Aug-2020 13:44:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.8	103.87
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.46
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.35
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.8	88.84

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916443.d		
Injection Date:	19-Aug-2020 03:40:18	Instrument ID:	A3UX19
Lims ID:	240-134931-B-13	Lab Sample ID:	240-134931-13
Client ID:	MSA-SW41A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

22 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	8.7		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41B-081220 Lab Sample ID: 240-134931-14

Matrix: Water Lab File ID: U1916444.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:20

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916444.d
Lims ID: 240-134931-B-14
Client ID: MSA-SW41B-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 04:02:33 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-027
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:45:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	887179	20.0	
* 2 Chlorobenzene-d5	117	8.499	8.500	-0.001	85	664563	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	326648	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.060	5.049	0.011	94	252933	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	287036	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	850641	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	278599	18.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.906	1.918	-0.012	18	1797	0.1360	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	30248	8.70	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	36	533	0.4437	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	57	1652	0.1288	
40 2-Butanone (MEK)	72	4.645	4.634	0.011	96	2076	0.99	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.985	5.998	-0.013	89	1508	0.1076	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

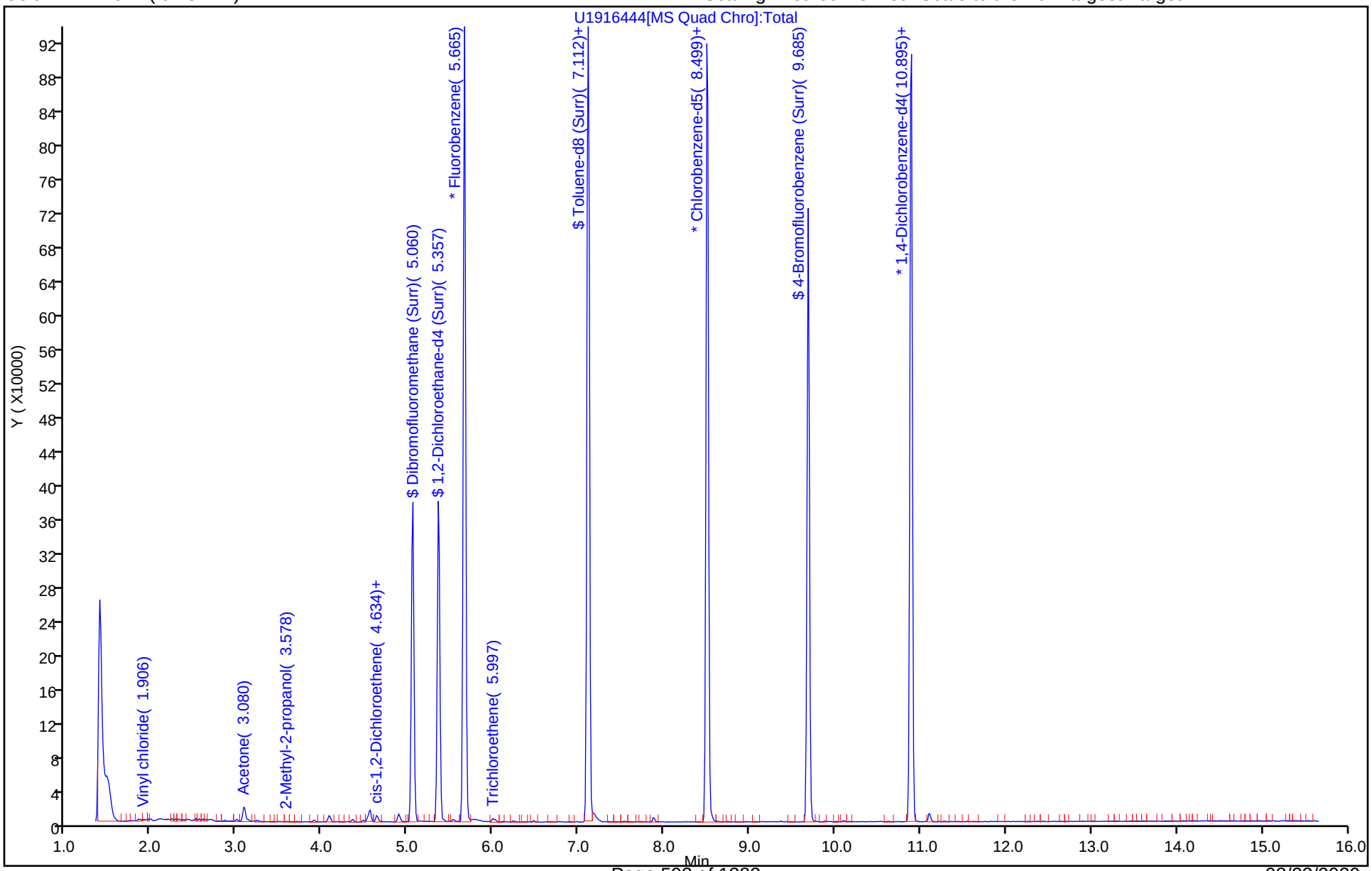
Report Date: 19-Aug-2020 13:45:17 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916444.d

Injection Date:	19-Aug-2020 04:02:33	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-14	Lab Sample ID:	240-134931-14	Worklist Smp#:	27
Client ID:	MSA-SW41B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916444.d
Lims ID: 240-134931-B-14
Client ID: MSA-SW41B-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 04:02:33 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-027
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

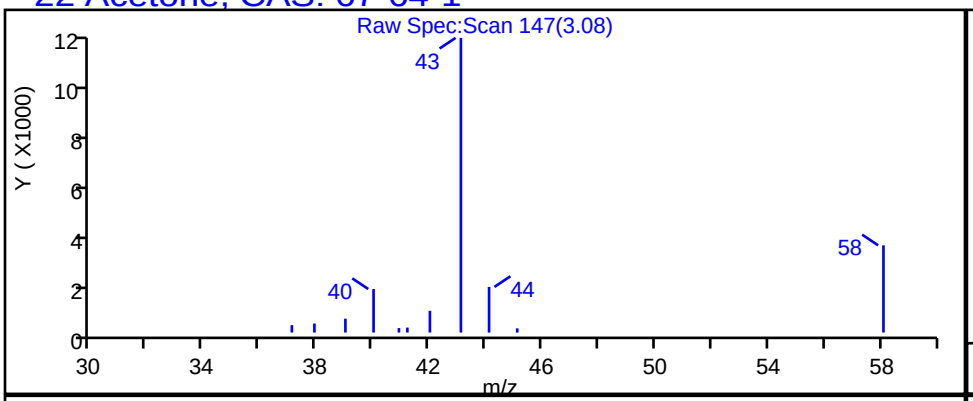
First Level Reviewer: laveyt Date: 19-Aug-2020 13:45:16

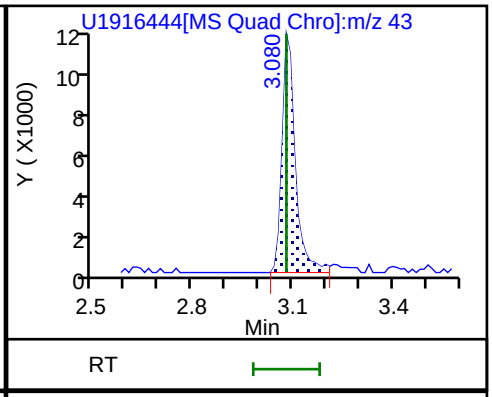
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	105.90
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.64
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.73
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	92.89

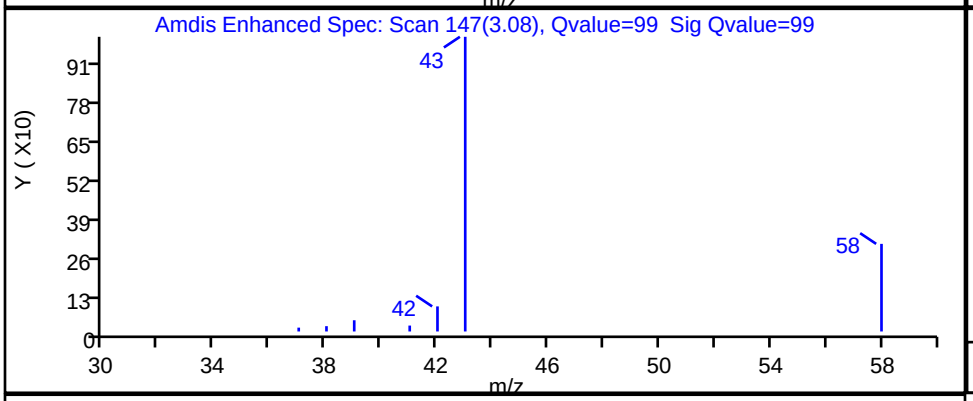
Eurofins TestAmerica, Canton

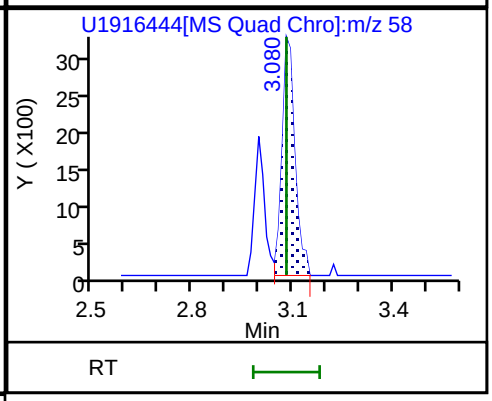
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916444.d		
Injection Date:	19-Aug-2020 04:02:33	Instrument ID:	A3UX19
Lims ID:	240-134931-B-14	Lab Sample ID:	240-134931-14
Client ID:	MSA-SW41B-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

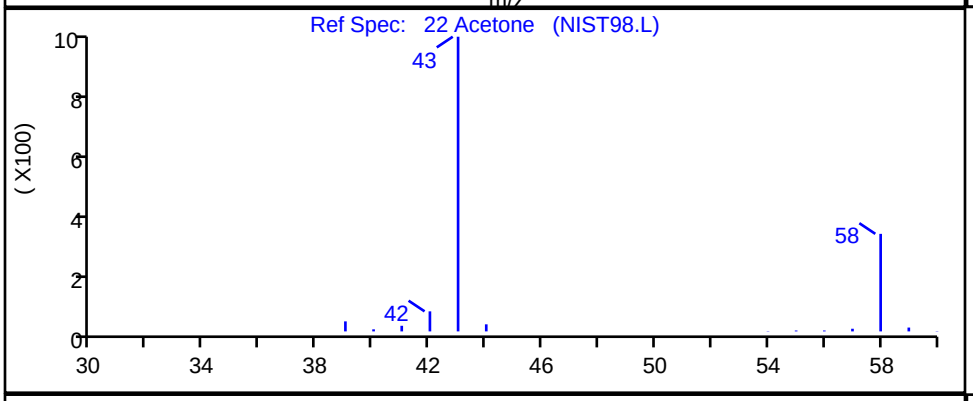
22 Acetone, CAS: 67-64-1

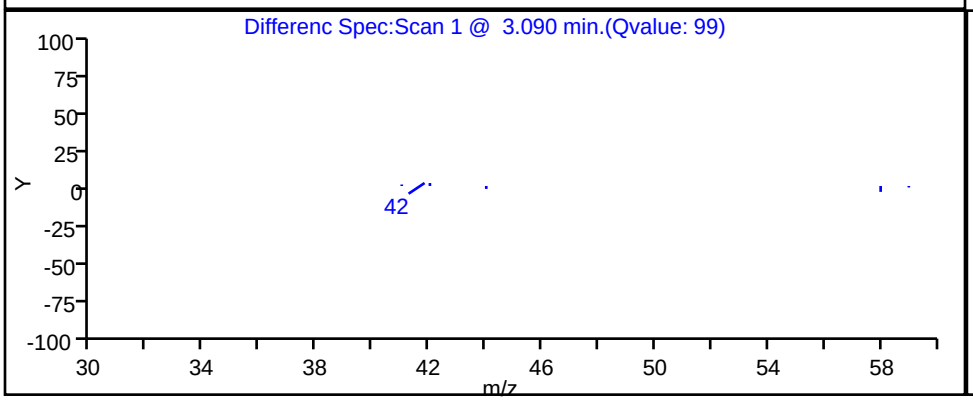


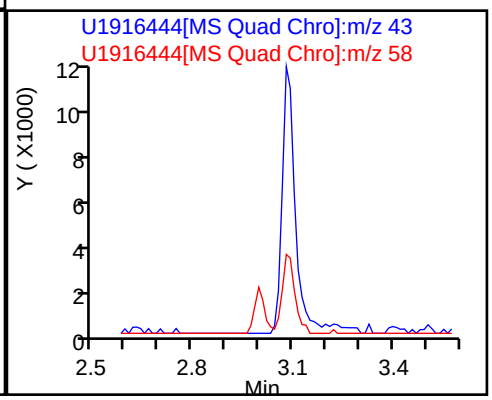












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	7.1		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41C-081220 Lab Sample ID: 240-134931-15

Matrix: Water Lab File ID: U1916445.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:22

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 04:24

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.: 447698 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916445.d
Lims ID: 240-134931-B-15
Client ID: MSA-SW41C-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 04:24:47 ALS Bottle#: 0 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-028
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:45:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	871203	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	663260	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	323077	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	93	251672	21.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	285717	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	823005	20.7	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	275161	18.4	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.906	1.918	-0.012	90	1703	0.1312	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	24231	7.09	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.602	3.578	0.024	7	576	0.4883	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	63	2015	0.1600	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1562	0.7593	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	84	1504	0.1093	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

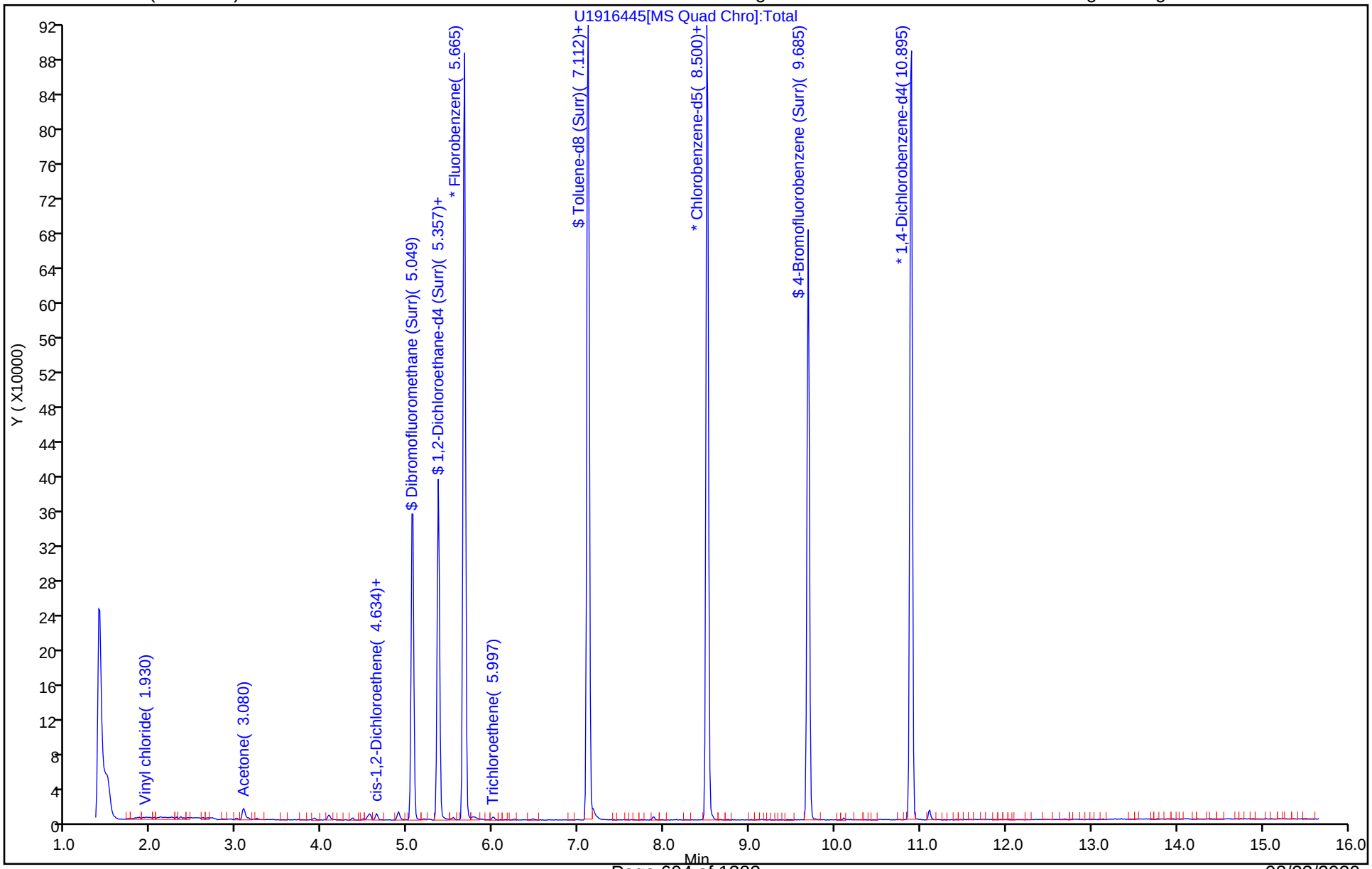
Report Date: 19-Aug-2020 13:45:59 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916445.d

Injection Date:	19-Aug-2020 04:24:47	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-15	Lab Sample ID:	240-134931-15	Worklist Smp#:	28
Client ID:	MSA-SW41C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916445.d
Lims ID: 240-134931-B-15
Client ID: MSA-SW41C-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 04:24:47 ALS Bottle#: 0 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-028
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

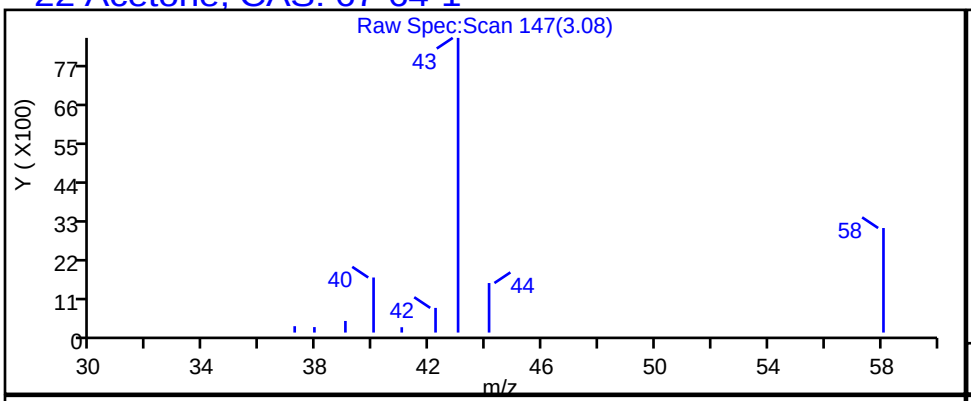
First Level Reviewer: laveyt Date: 19-Aug-2020 13:45:59

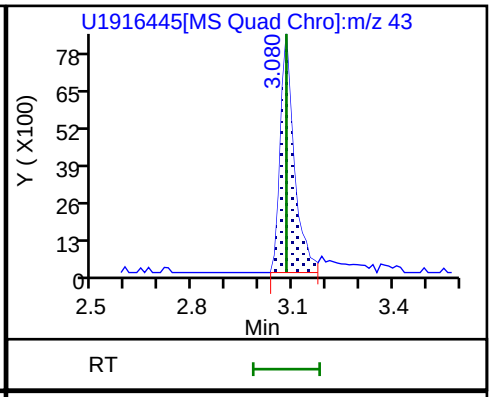
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.5	107.31
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	106.07
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.47
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.4	91.93

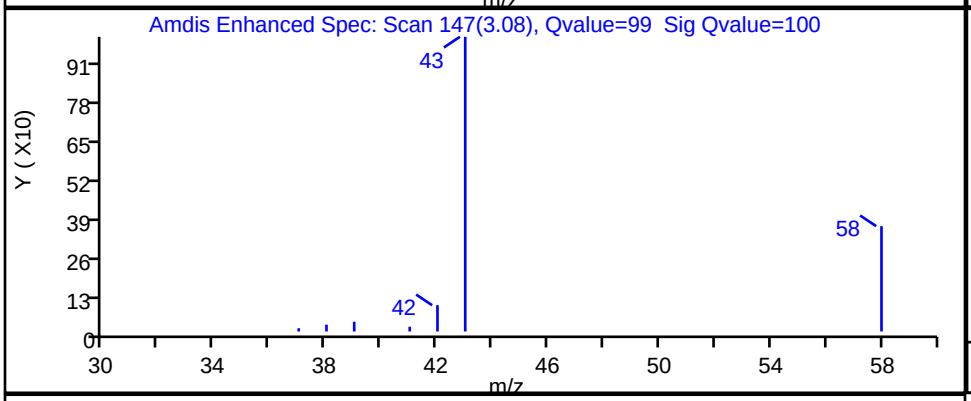
Eurofins TestAmerica, Canton

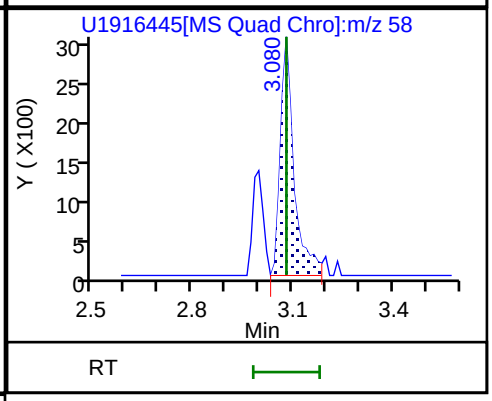
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916445.d		
Injection Date:	19-Aug-2020 04:24:47	Instrument ID:	A3UX19
Lims ID:	240-134931-B-15	Lab Sample ID:	240-134931-15
Client ID:	MSA-SW41C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

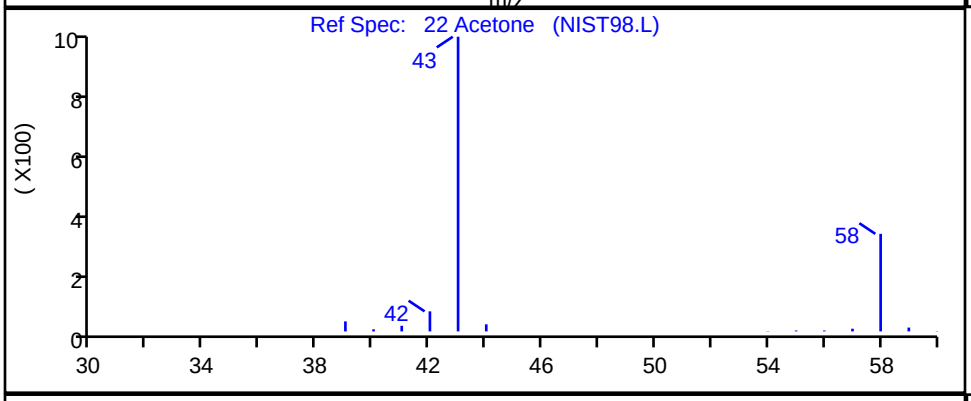
22 Acetone, CAS: 67-64-1

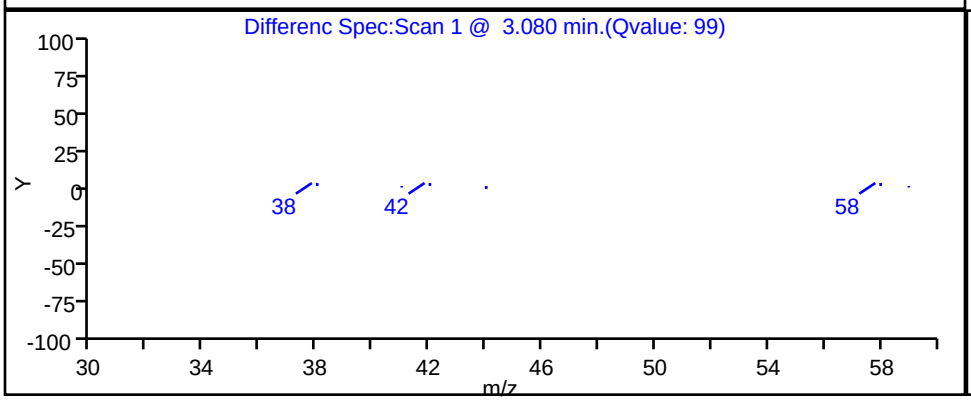


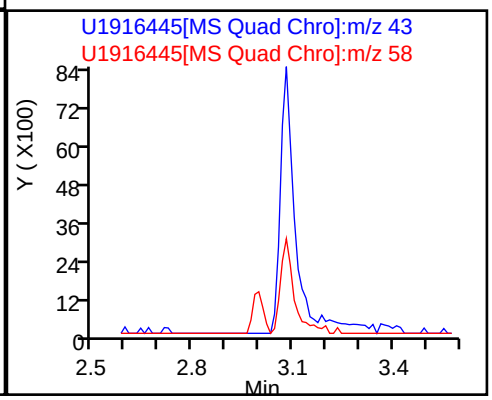












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 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)	94		75-130
460-00-4	4-Bromofluorobenzene (Surr)	110		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

Number TICs Found: 1 TIC Result Total: 8.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	10.20	8.7	T J	

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW41D-081220 Lab Sample ID: 240-134931-16

Matrix: Water Lab File ID: U1279836.D

Analysis Method: 8260C Date Collected: 08/12/2020 09:25

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 02:37

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.: 447867 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279836.D
Lims ID: 240-134931-B-16
Client ID: MSA-SW41D-081220
Sample Type: Client
Inject. Date: 20-Aug-2020 02:37:30 ALS Bottle#: 31 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-032
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 15:04:14 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 15:04:14

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	932458	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	626218	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	323122	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	220349	17.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.811	0.012	94	283318	18.7	
$ 6 Toluene-d8 (Surr)	98	6.456	6.444	0.012	93	861339	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	94	319729	22.0	
9 Dichlorodifluoromethane	85		1.392				ND	
10 Chloromethane	50		1.581				ND	
12 Vinyl chloride	62		1.676				ND	
14 Bromomethane	94		1.924				ND	
15 Chloroethane	64		1.983				ND	
17 Trichlorofluoromethane	101		2.173				ND	
21 1,1-Dichloroethene	61		2.622				ND	
22 112TCTFE	101		2.658				ND	
23 Acetone	43	2.693	2.681	0.012	99	31463	5.30	
25 Carbon disulfide	76		2.812				ND	
29 Methylene Chloride	49		3.048				ND	
30 2-Methyl-2-propanol	59		3.166				ND	
33 Methyl tert-butyl ether	73		3.285				ND	
32 trans-1,2-Dichloroethene	61		3.285				ND	
35 1,1-Dichloroethane	63		3.640				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 2,2-Dichloropropane	77		4.125				ND	
41 cis-1,2-Dichloroethene	96		4.137				ND	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	2902	0.9861	
46 Chlorobromomethane	49		4.326				ND	
48 Chloroform	83		4.397				ND	
49 1,1,1-Trichloroethane	97		4.551				ND	
51 1,1-Dichloropropene	75		4.681				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		4.859				ND	
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		5.592				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		6.350				ND	U
71 Toluene	91		6.503				ND	
72 trans-1,3-Dichloropropene	75		6.705				ND	
76 Tetrachloroethene	166		7.000				ND	
77 1,3-Dichloropropane	76		7.024				ND	
78 2-Hexanone	43		7.083				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				ND	
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 Bromobenzene	156		9.000				ND	
93 1,1,2,2-Tetrachloroethane	83		9.000				ND	
94 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		9.580				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		9.935				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-Chloropropane	157		11.130				ND	
115 1,2,4-Trichlorobenzene	180		11.947				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		16.020				ND	
T 129 Chlorodifluoromethane TIC	51		1.250				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

Eurofins TestAmerica, Canton
Tentatively Identified Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279836.D				
Lims ID:	240-134931-B-16				
Client ID:	MSA-SW41D-081220				
Sample Type:	Client				
Inject. Date:	20-Aug-2020 02:37:30	ALS Bottle#:	31	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0101160-032				
Operator ID:	001904	Instrument ID:	A3UX12		
Method:	\\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	20-Aug-2020 15:04:14	Calib Date:	16-Jul-2020 20:20:30		
Tic RT Window:	1.600 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromfs\Canton\Database\NIST98.L				
Min. Match:	50				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1043				
First Level Reviewer: laveyt		Date:	20-Aug-2020 15:04:14		

Tentative Identified Compound Results

RT	Area	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
		Unknown						
10.195	834767	8.67	3					

Quantitation Compounds

Compound	RT	Area	Amount ug/l
* 3 1,4-Dichlorobenzene-d4	9.970	1924796	20.0

QC Flag Legend

Processing Flags

Reagents:

vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

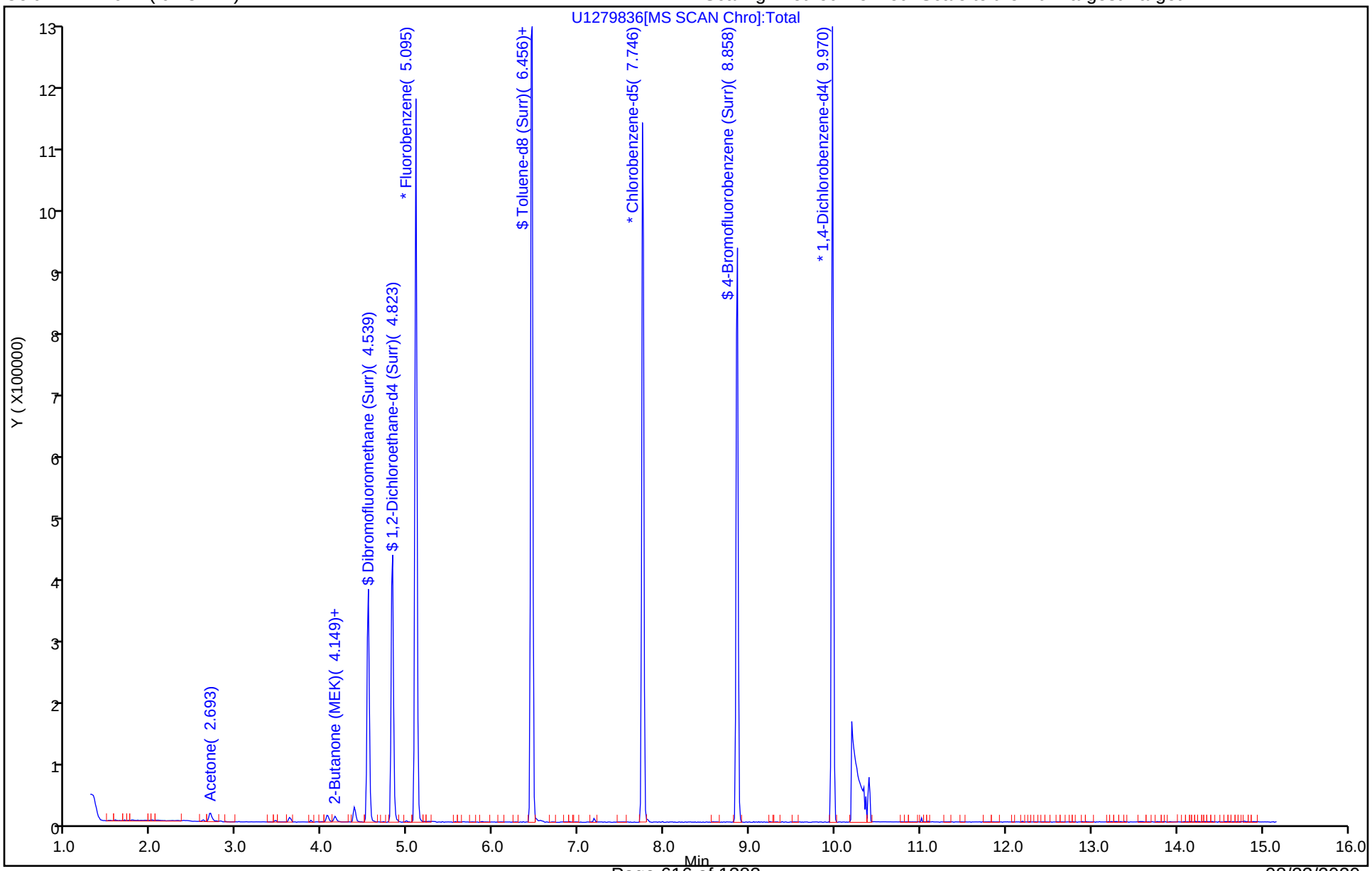
Report Date: 20-Aug-2020 15:04:15 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279836.D

Injection Date:	20-Aug-2020 02:37:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	240-134931-B-16	Lab Sample ID:	240-134931-16	Worklist Smp#:	32
Client ID:	MSA-SW41D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279836.D
Lims ID: 240-134931-B-16
Client ID: MSA-SW41D-081220
Sample Type: Client
Inject. Date: 20-Aug-2020 02:37:30 ALS Bottle#: 31 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-032
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 15:04:14 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 15:04:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.8	89.02
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	93.52
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.68
$ 7 4-Bromofluorobenzene (Surr)	20.0	22.0	110.24

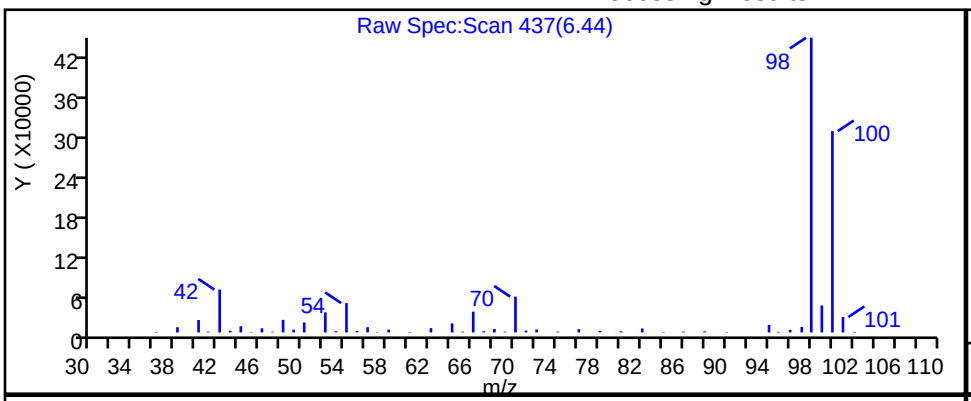
User Disabled Compound Report

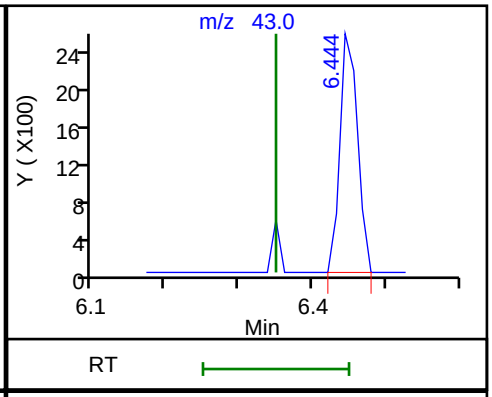
Eurofins TestAmerica, Canton

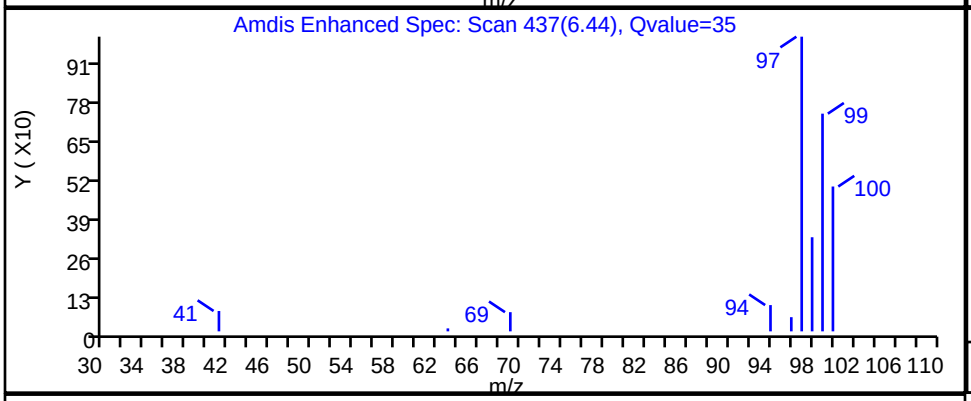
Data File:	\\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279836.D				
Injection Date:	20-Aug-2020 02:37:30	Instrument ID:	A3UX12		
Lims ID:	240-134931-B-16	Lab Sample ID:	240-134931-16		
Client ID:	MSA-SW41D-081220				
Operator ID:	001904	ALS Bottle#:	31	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

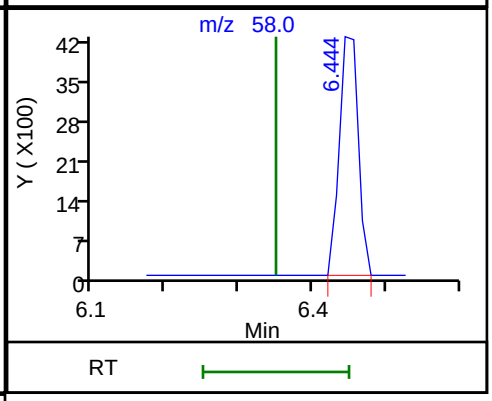
70 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

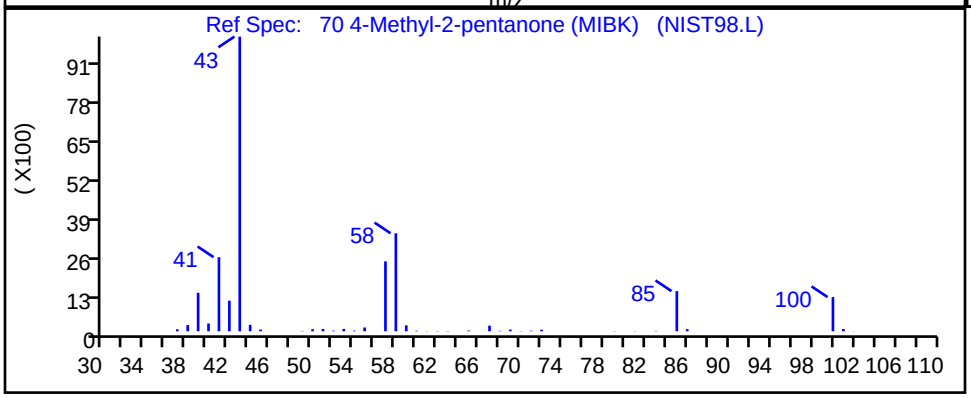
Processing Results











RT	Mass	Response	Amount
6.44	43.00	4236	0.209296
6.44	58.00	7782	

Reviewer: laveyt, 20-Aug-2020 15:04:01

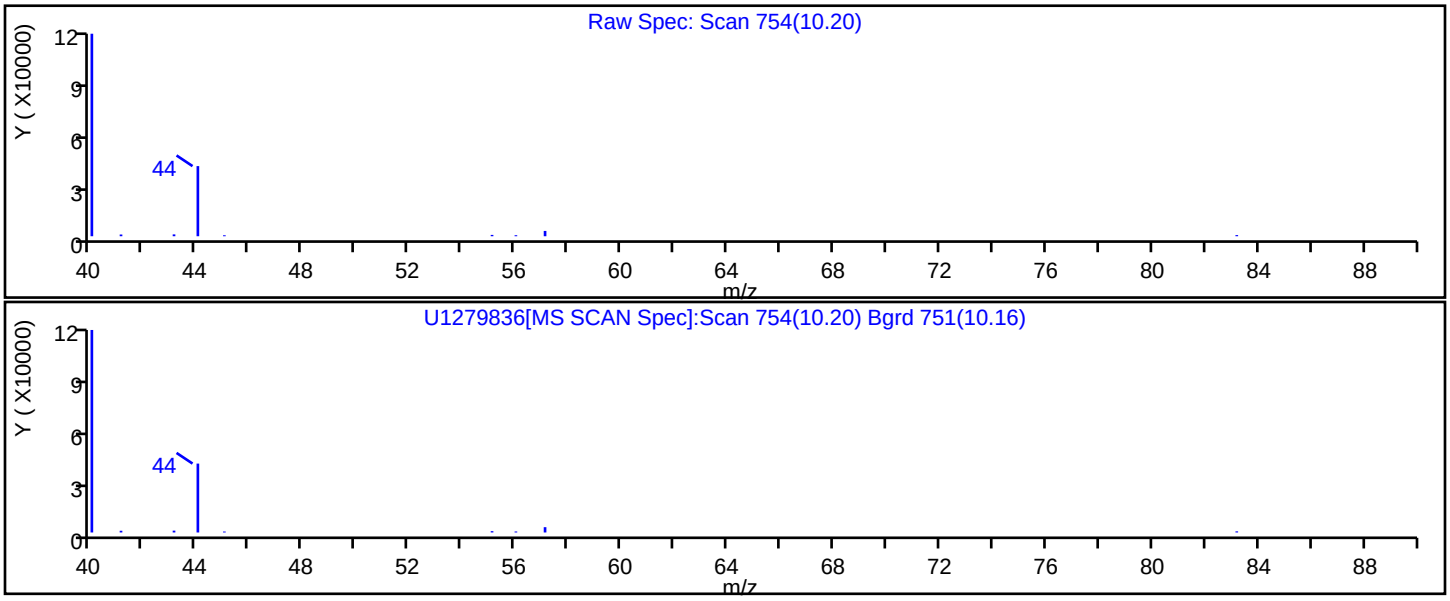
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 20-Aug-2020 15:04:16 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279836.D				
Injection Date:	20-Aug-2020 02:37:30	Instrument ID:	A3UX12		
Lims ID:	240-134931-B-16	Lab Sample ID:	240-134931-16		
Client ID:	MSA-SW41D-081220				
Operator ID:	001904	ALS Bottle#:	31	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 50



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	11		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 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)	93		75-130
460-00-4	4-Bromofluorobenzene (Surr)	106		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42A-081220 Lab Sample ID: 240-134931-17

Matrix: Water Lab File ID: U1279837.D

Analysis Method: 8260C Date Collected: 08/12/2020 10:06

Sample wt/vol: 5(mL) Date Analyzed: 08/20/2020 03:00

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.: 447867 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279837.D
Lims ID: 240-134931-B-17
Client ID: MSA-SW42A-081220
Sample Type: Client
Inject. Date: 20-Aug-2020 03:00:30 ALS Bottle#: 32 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-033
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 15:05:29 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 15:05:29

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	98	952910	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.746	0.012	87	623276	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.001	95	330885	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	224498	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.811	0.012	95	287747	18.6	
$ 6 Toluene-d8 (Surr)	98	6.456	6.444	0.012	93	854665	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	94	305387	21.2	
9 Dichlorodifluoromethane	85		1.392				ND	
10 Chloromethane	50		1.581				ND	
12 Vinyl chloride	62		1.676				ND	
14 Bromomethane	94		1.924				ND	
15 Chloroethane	64		1.983				ND	
17 Trichlorofluoromethane	101		2.173				ND	
21 1,1-Dichloroethene	61		2.622				ND	
22 112TCTFE	101		2.658				ND	
23 Acetone	43	2.705	2.681	0.024	100	66860	11.0	
25 Carbon disulfide	76		2.812				ND	
29 Methylene Chloride	49		3.048				ND	
30 2-Methyl-2-propanol	59		3.166				ND	
33 Methyl tert-butyl ether	73		3.285				ND	
32 trans-1,2-Dichloroethene	61		3.285				ND	
35 1,1-Dichloroethane	63		3.640				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 2,2-Dichloropropane	77		4.125				ND	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	63	2486	0.1450	
42 2-Butanone (MEK)	72	4.161	4.149	0.012	100	4690	1.56	
46 Chlorobromomethane	49		4.326				ND	
48 Chloroform	83		4.397				ND	
49 1,1,1-Trichloroethane	97		4.551				ND	
51 1,1-Dichloropropene	75		4.681				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		4.859				ND	
55 1,2-Dichloroethane	62		4.882				ND	
56 Tert-amyl methyl ether	73		4.953				ND	
59 Trichloroethene	130	5.403	5.403	0.000	88	2645	0.2000	
62 1,2-Dichloropropane	63		5.592				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		6.350				ND	
71 Toluene	91		6.503				ND	
72 trans-1,3-Dichloropropene	75		6.705				ND	
76 Tetrachloroethene	166		7.000				ND	
77 1,3-Dichloropropane	76		7.024				ND	
78 2-Hexanone	43		7.083				ND	U
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				ND	
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 Bromobenzene	156		9.000				ND	
93 1,1,2,2-Tetrachloroethane	83		9.000				ND	
94 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		9.580				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		9.935				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-Chloropropane	157		11.130				ND	
115 1,2,4-Trichlorobenzene	180		11.947				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		16.020				ND	
T 129 Chlorodifluoromethane TIC	51		1.250				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

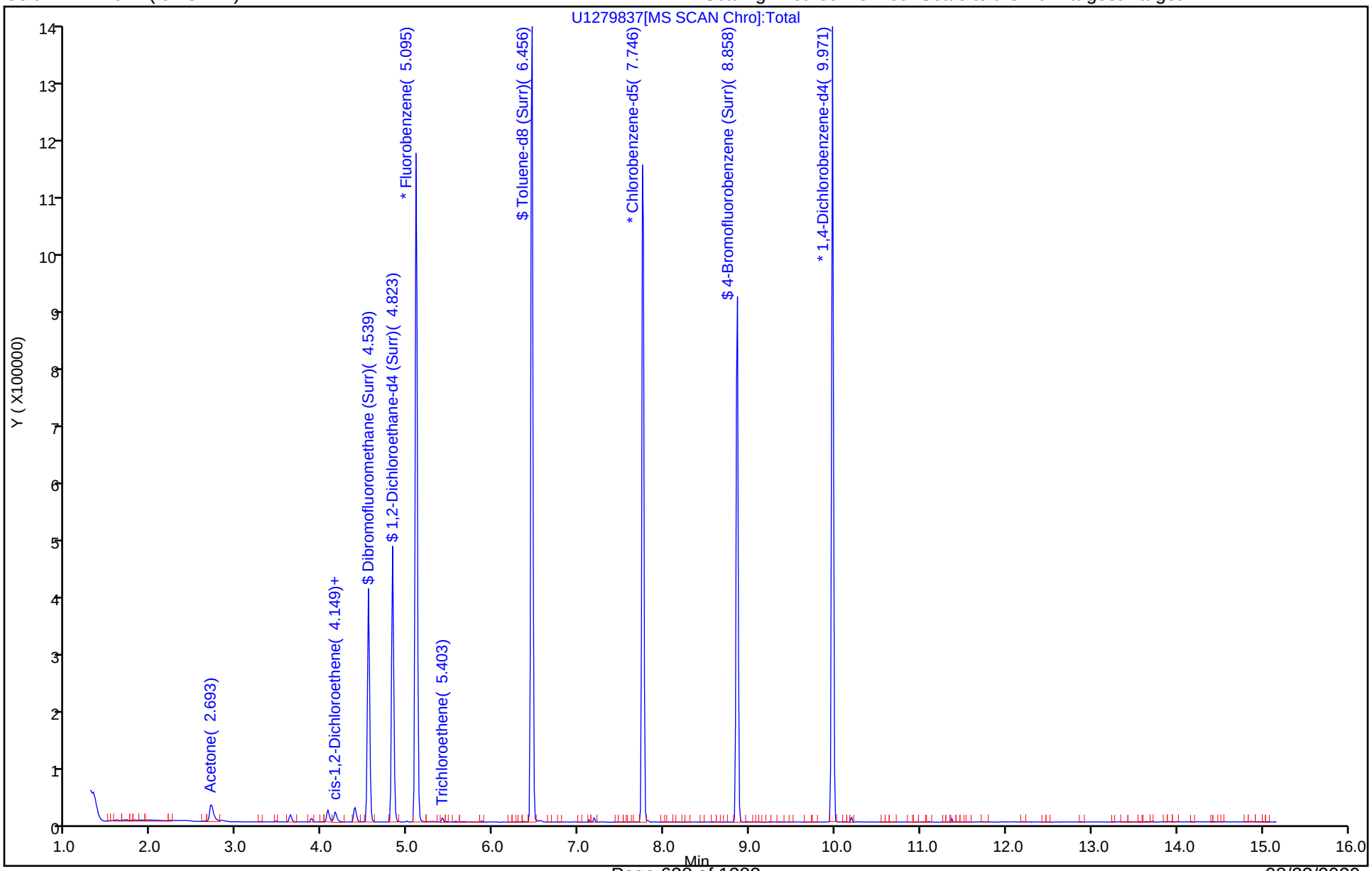
Report Date: 20-Aug-2020 15:05:30 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279837.D

Injection Date:	20-Aug-2020 03:00:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	240-134931-B-17	Lab Sample ID:	240-134931-17	Worklist Smp#:	33
Client ID:	MSA-SW42A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279837.D
Lims ID: 240-134931-B-17
Client ID: MSA-SW42A-081220
Sample Type: Client
Inject. Date: 20-Aug-2020 03:00:30 ALS Bottle#: 32 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-033
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 15:05:29 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

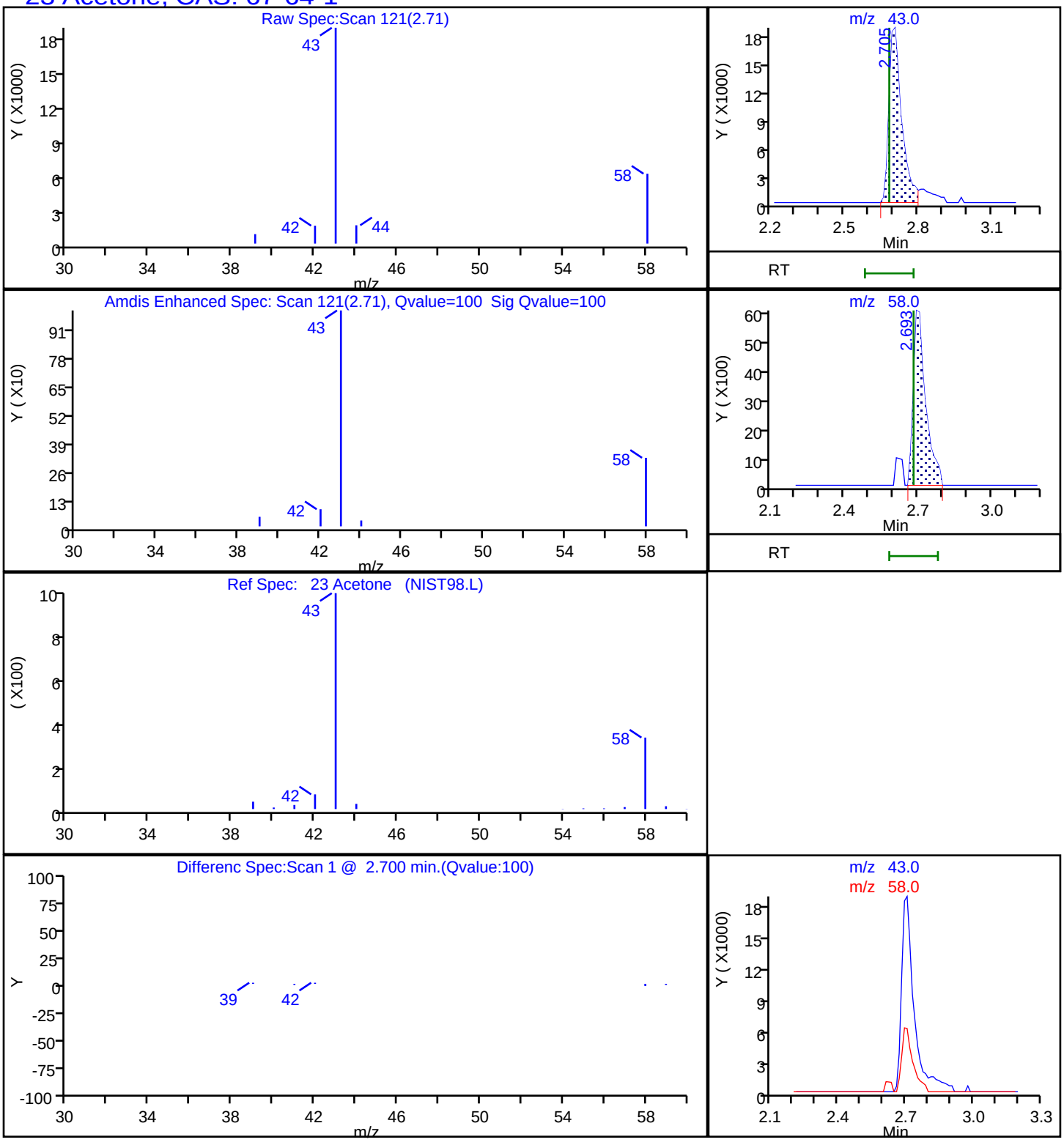
First Level Reviewer: laveyt Date: 20-Aug-2020 15:05:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.7	88.75
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.6	92.94
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.37
$ 7 4-Bromofluorobenzene (Surr)	20.0	21.2	105.79

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279837.D		
Injection Date:	20-Aug-2020 03:00:30	Instrument ID:	A3UX12
Lims ID:	240-134931-B-17	Lab Sample ID:	240-134931-17
Client ID:	MSA-SW42A-081220		
Operator ID:	001904	ALS Bottle#:	32 Worklist Smp#: 33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

23 Acetone, CAS: 67-64-1



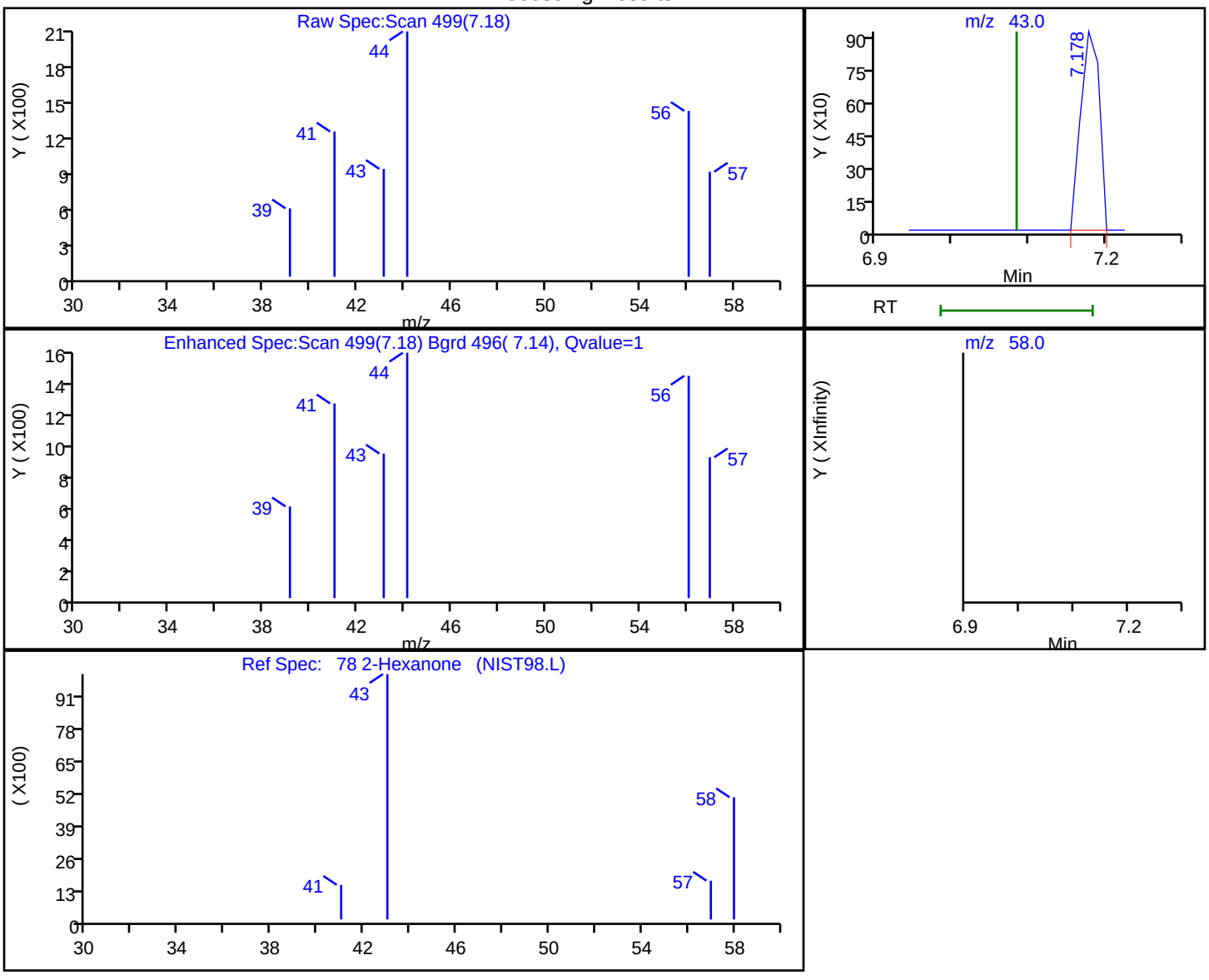
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279837.D				
Injection Date:	20-Aug-2020 03:00:30	Instrument ID:	A3UX12		
Lims ID:	240-134931-B-17	Lab Sample ID:	240-134931-17		
Client ID:	MSA-SW42A-081220				
Operator ID:	001904	ALS Bottle#:	32	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

78 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
7.18	43.00	1563	0.115297
7.08	58.00	0	

Reviewer: laveyt, 20-Aug-2020 15:05:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916414.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:21

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916414.d
Lims ID: 240-134931-B-18
Client ID: MSA-SW42B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 02:21:28 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-027
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:50:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	901991	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	680306	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	338031	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	94	258644	21.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	295766	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	854944	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	290561	18.9	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	94	2458	0.1829	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	33083	9.36	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.590	0.000	6	587	0.4806	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	100	1529	0.7179	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	70	3419	0.2623	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	86	1902	0.1335	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

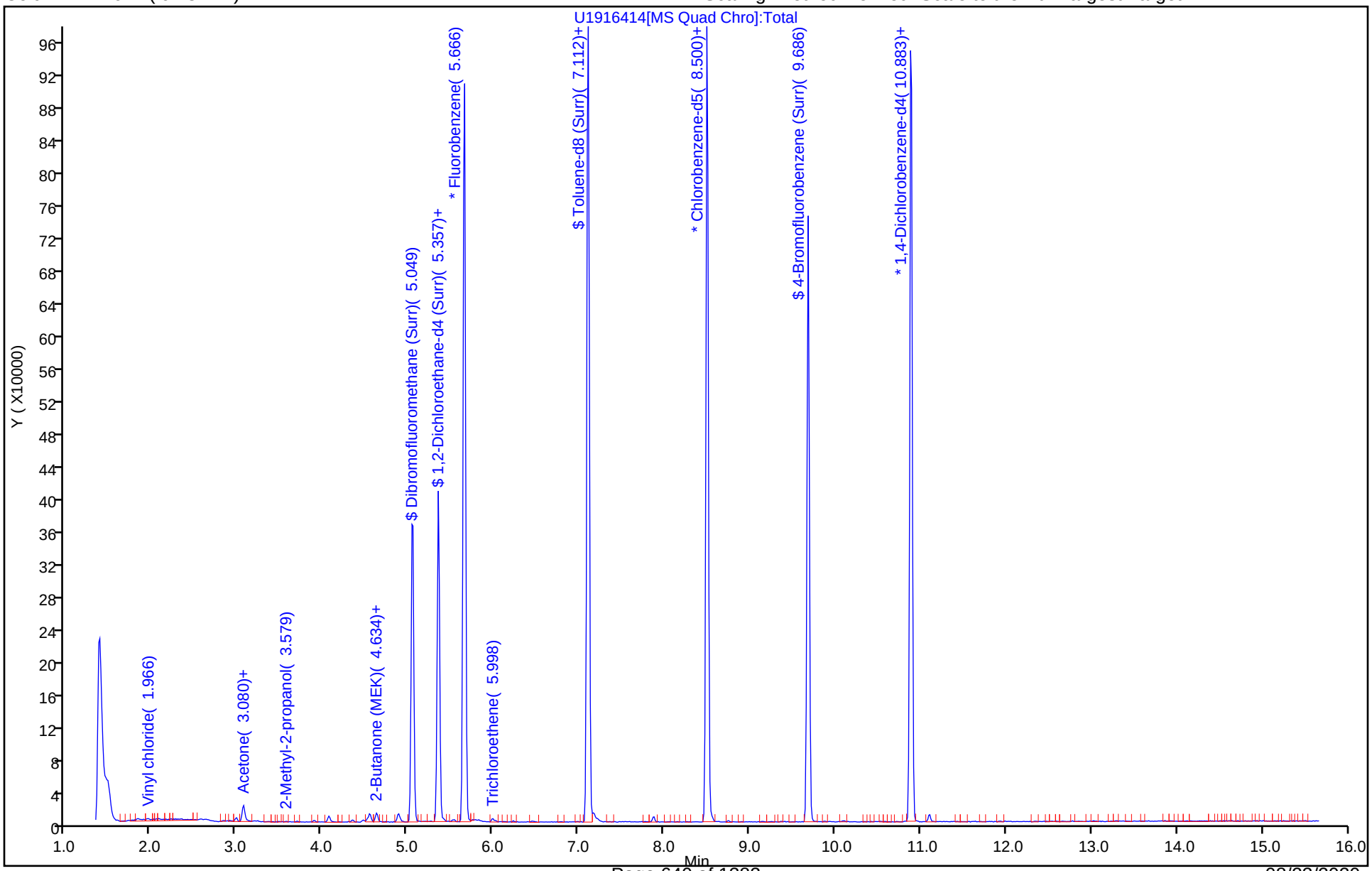
Report Date: 18-Aug-2020 14:50:45 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916414.d

Injection Date:	18-Aug-2020 02:21:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-18	Lab Sample ID:	240-134931-18	Worklist Smp#:	27
Client ID:	MSA-SW42B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916414.d
Lims ID: 240-134931-B-18
Client ID: MSA-SW42B-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 02:21:28 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-027
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:50:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.3	106.52
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	106.05
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.79
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.9	94.64

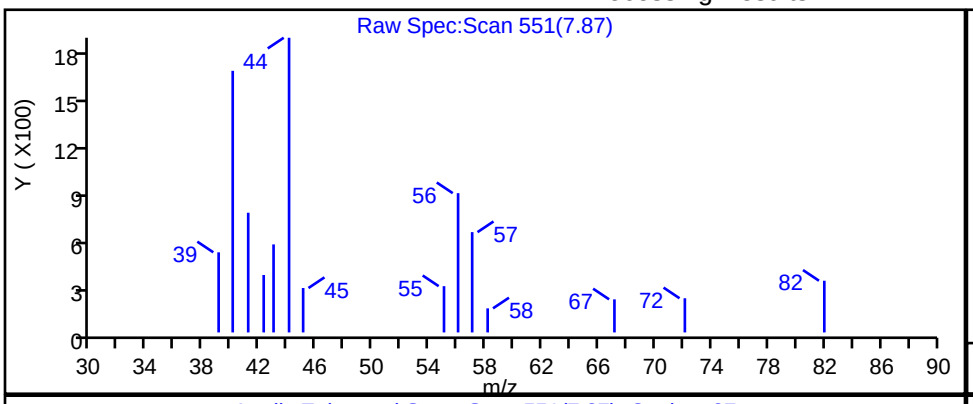
User Disabled Compound Report

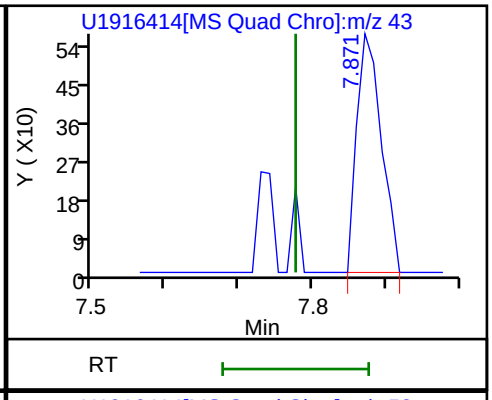
Eurofins TestAmerica, Canton

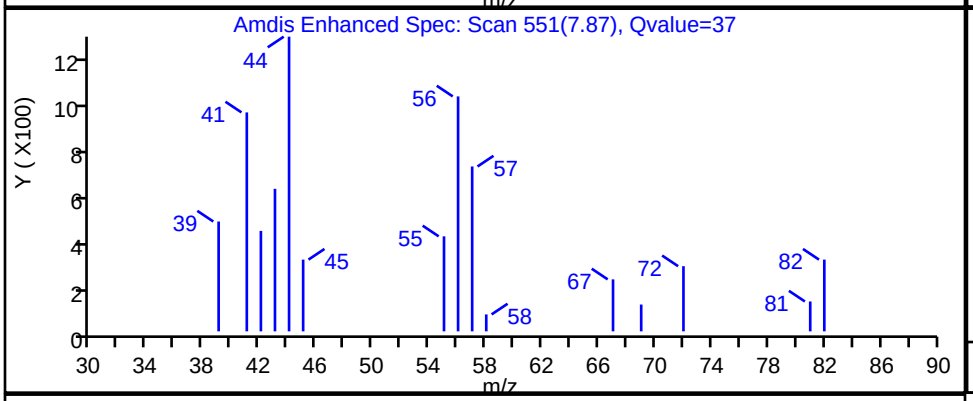
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916414.d				
Injection Date:	18-Aug-2020 02:21:28	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-18	Lab Sample ID:	240-134931-18		
Client ID:	MSA-SW42B-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

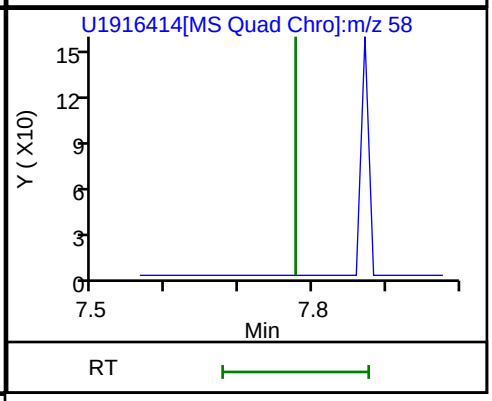
77 2-Hexanone, CAS: 591-78-6

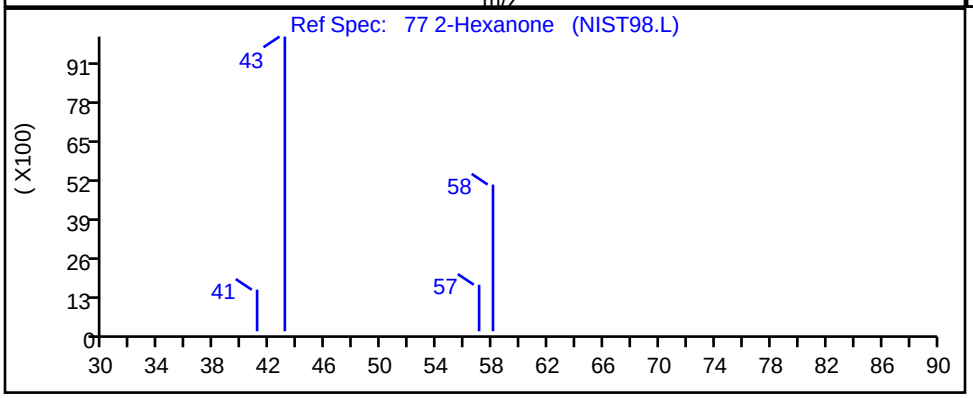
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1325	0.123703
7.78	58.00	0	

Reviewer: laveyt, 18-Aug-2020 14:50:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916435.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	8.1		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42B-081220 Lab Sample ID: 240-134931-18

Matrix: Water Lab File ID: U1916435.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:08

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 00:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916435.d
Lims ID: 240-134931-C-18
Client ID: MSA-SW42B-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 00:41:22 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-018
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:40:18 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:40:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	879575	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	649592	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	318342	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	247752	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	281522	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	816272	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	272258	18.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.918	1.918	0.000	95	2471	0.1886	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	27763	8.05	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.579	3.578	0.001	23	336	0.2821	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	76	3116	0.2451	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	97	1578	0.7598	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.986	5.998	-0.012	88	1394	0.1003	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

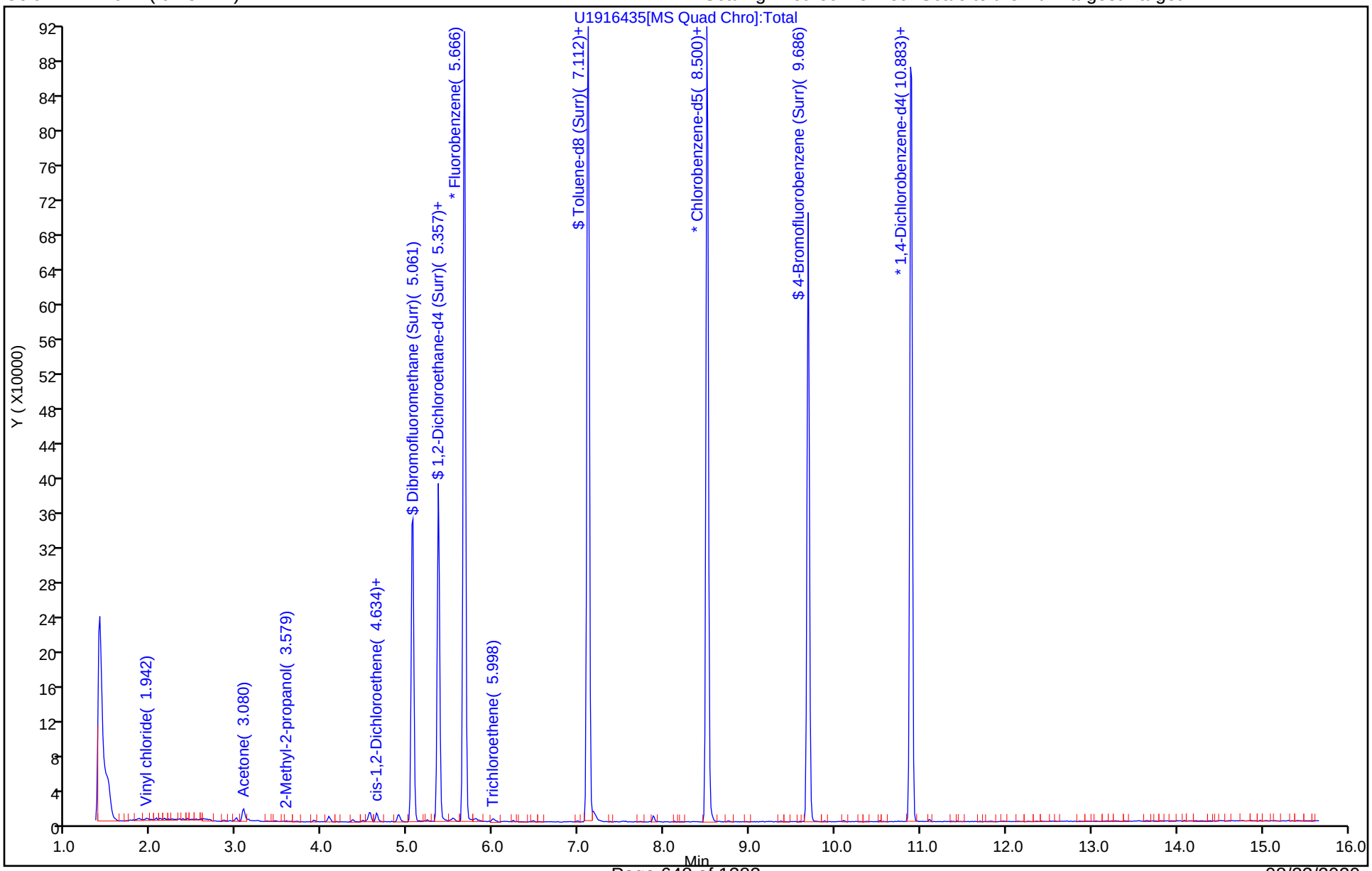
Report Date: 19-Aug-2020 13:40:18 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916435.d

Injection Date:	19-Aug-2020 00:41:22	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-18	Lab Sample ID:	240-134931-18	Worklist Smp#:	18
Client ID:	MSA-SW42B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916435.d
Lims ID: 240-134931-C-18
Client ID: MSA-SW42B-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 00:41:22 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-018
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:40:18 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

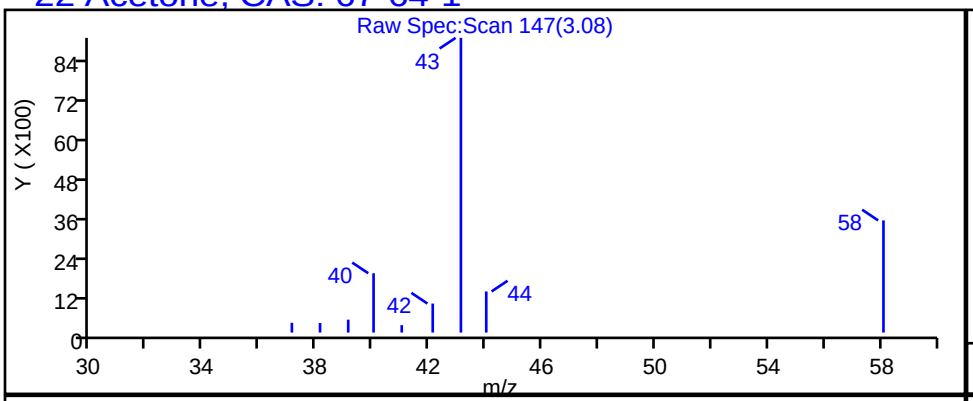
First Level Reviewer: laveyt Date: 19-Aug-2020 13:40:18

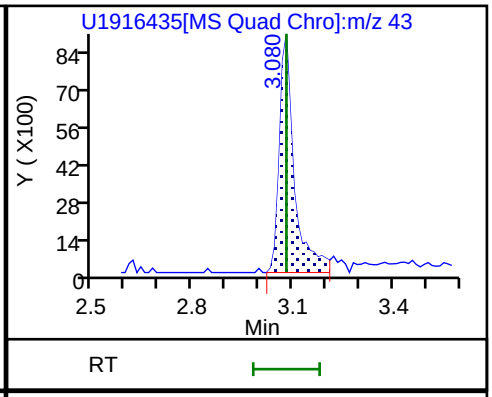
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.63
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.52
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.78
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	92.87

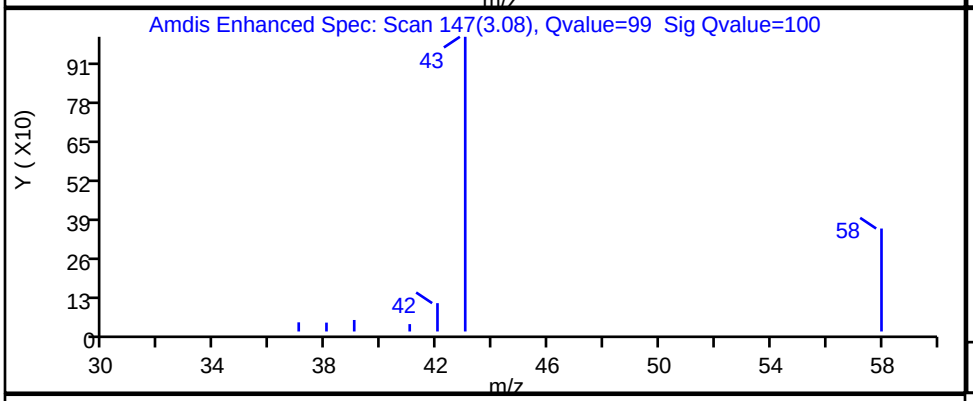
Eurofins TestAmerica, Canton

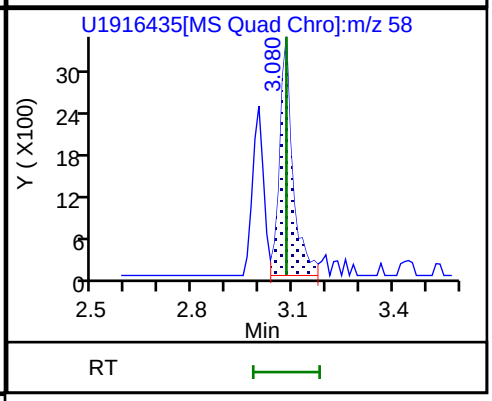
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916435.d		
Injection Date:	19-Aug-2020 00:41:22	Instrument ID:	A3UX19
Lims ID:	240-134931-C-18	Lab Sample ID:	240-134931-18
Client ID:	MSA-SW42B-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

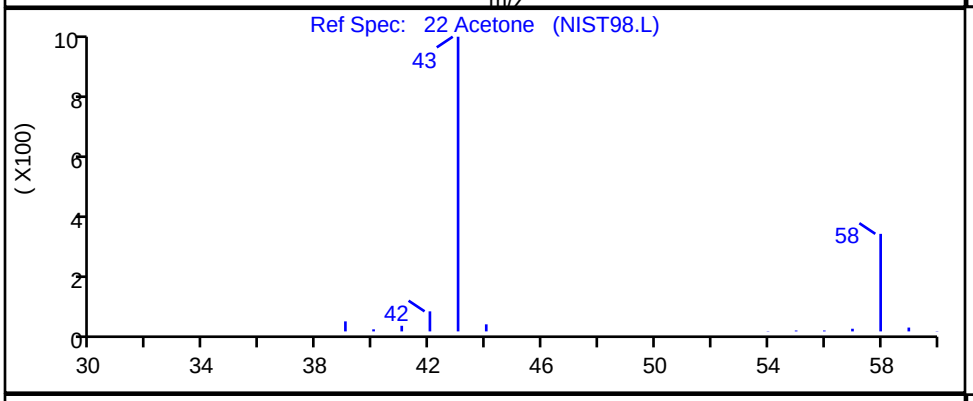
22 Acetone, CAS: 67-64-1

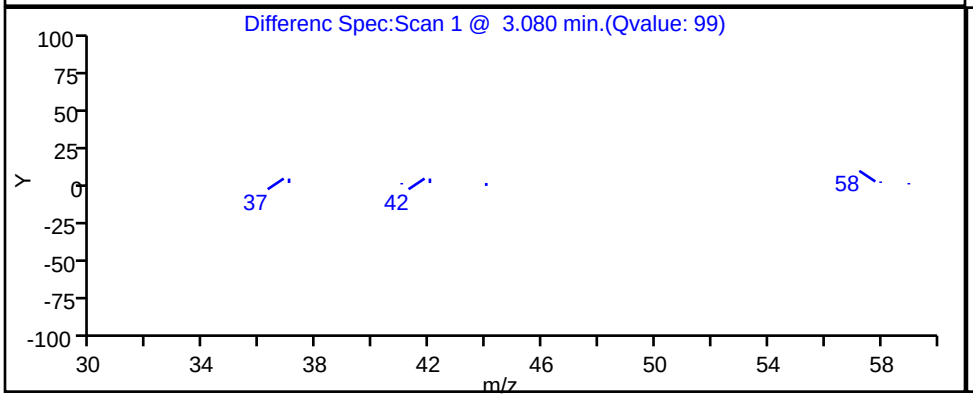


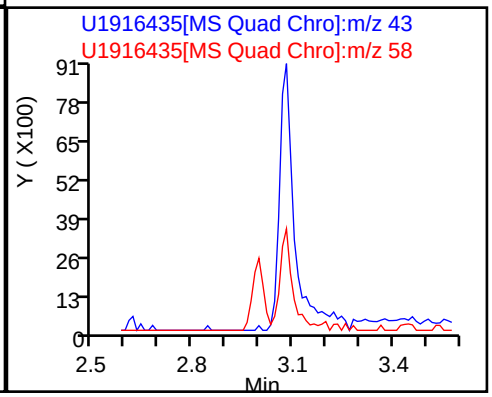












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916415.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 02:44

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916415.d
Lims ID: 240-134931-B-19
Client ID: MSA-SW42C-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 02:44:04 ALS Bottle#: 0 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-028
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:51:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	896727	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	675389	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	342413	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	251118	20.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	283888	20.5	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	831439	20.5	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	284275	18.7	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	30724	8.74	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.567	3.590	-0.024	29	614	0.5057	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	98	1742	0.8227	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	55	1381	0.1066	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

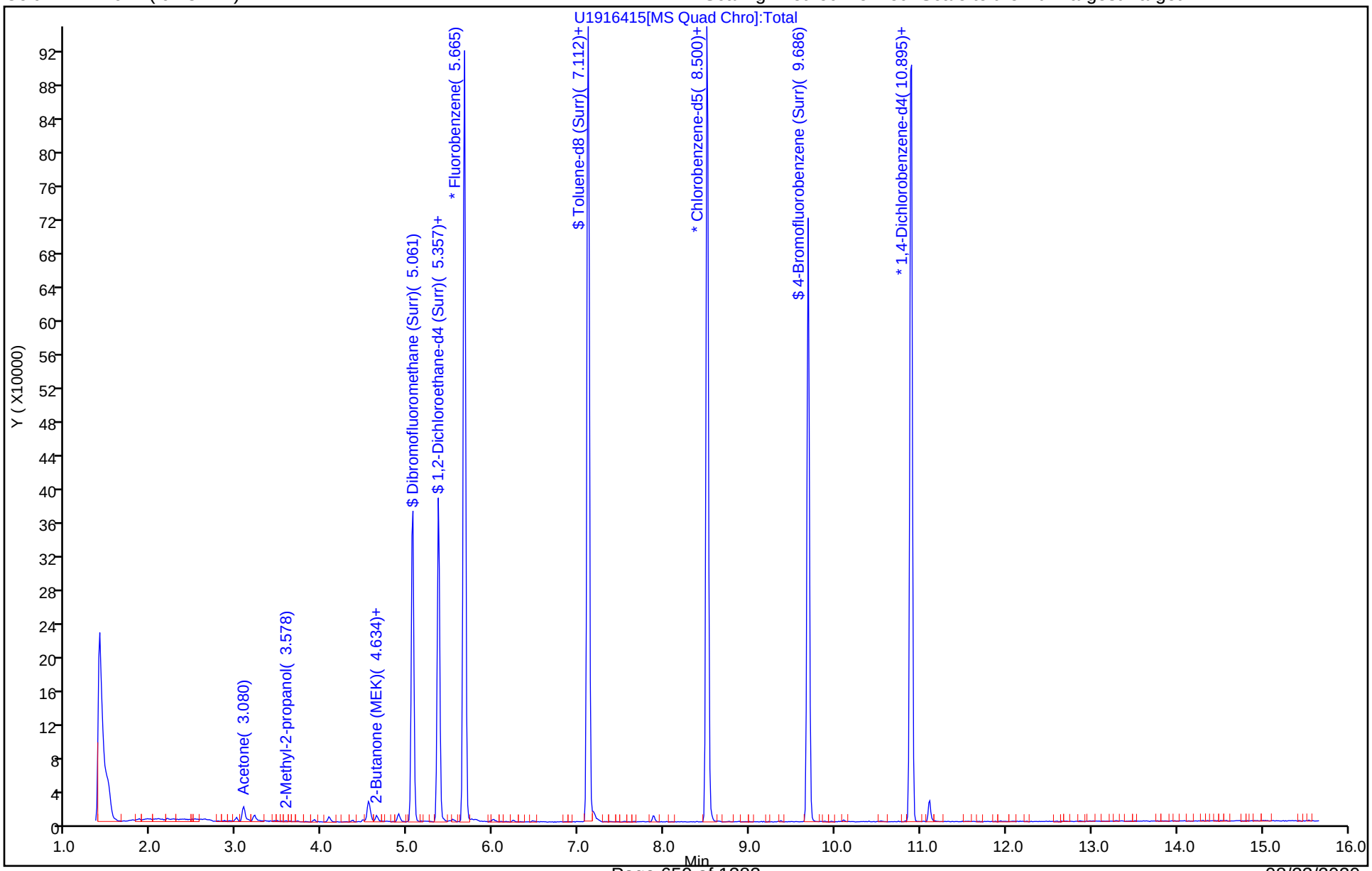
Report Date: 18-Aug-2020 14:51:08 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916415.d

Injection Date:	18-Aug-2020 02:44:04	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-19	Lab Sample ID:	240-134931-19	Worklist Smp#:	28
Client ID:	MSA-SW42C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916415.d
Lims ID: 240-134931-B-19
Client ID: MSA-SW42C-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 02:44:04 ALS Bottle#: 0 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-028
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:51:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.8	104.03
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.5	102.39
$ 6 Toluene-d8 (Surr)	20.0	20.5	102.65
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916436.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	7.6		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42C-081220 Lab Sample ID: 240-134931-19

Matrix: Water Lab File ID: U1916436.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:10

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:03

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916436.d
Lims ID: 240-134931-C-19
Client ID: MSA-SW42C-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 01:03:46 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-019
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:40:18 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:40:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	874876	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	632191	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	312526	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	248180	21.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	280143	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	805126	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	268181	18.8	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62		1.918				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	26064	7.60	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.578	0.012	7	328	0.2769	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	98	1622	0.7851	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

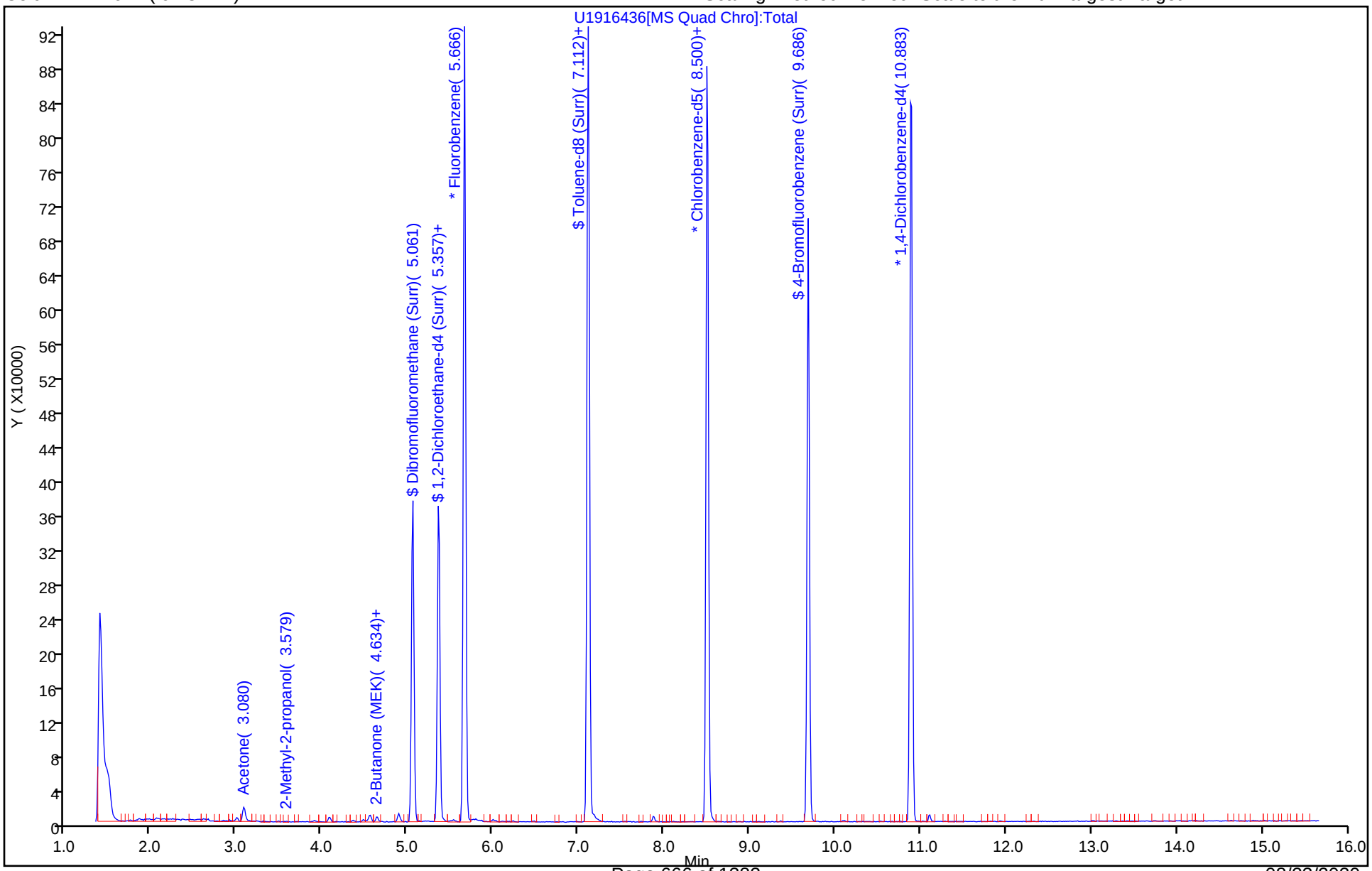
Report Date: 19-Aug-2020 13:40:43 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916436.d

Injection Date:	19-Aug-2020 01:03:46	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-19	Lab Sample ID:	240-134931-19	Worklist Smp#:	19
Client ID:	MSA-SW42C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916436.d
Lims ID: 240-134931-C-19
Client ID: MSA-SW42C-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 01:03:46 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-019
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:40:18 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

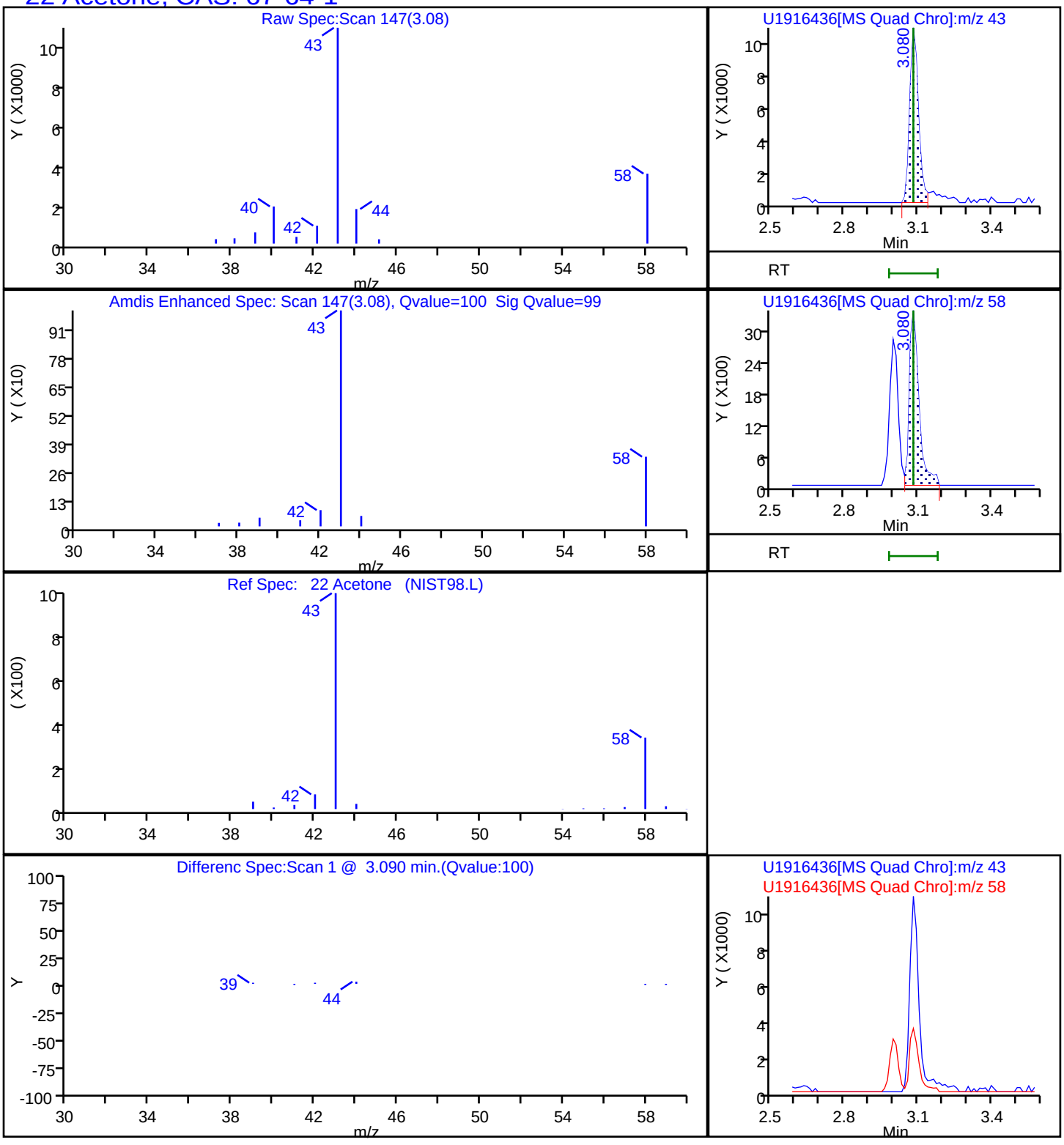
First Level Reviewer: laveyt Date: 19-Aug-2020 13:40:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.38
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.56
$ 6 Toluene-d8 (Surr)	20.0	21.2	106.19
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.8	94.00

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916436.d		
Injection Date:	19-Aug-2020 01:03:46	Instrument ID:	A3UX19
Lims ID:	240-134931-C-19	Lab Sample ID:	240-134931-19
Client ID:	MSA-SW42C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

22 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW42D-081220 Lab Sample ID: 240-134931-20

Matrix: Water Lab File ID: U1916375.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:13

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916375.d
Lims ID: 240-134931-B-20
Client ID: MSA-SW42D-081220
Sample Type: Client
Inject. Date: 14-Aug-2020 23:20:11 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-018
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:40:31 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:40:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	933963	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	703049	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	350679	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	266497	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	302916	21.0	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	886031	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	296977	18.7	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	99	17636	4.82	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.579	3.579	-0.001	14	382	0.3021	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	1116	0.5060	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

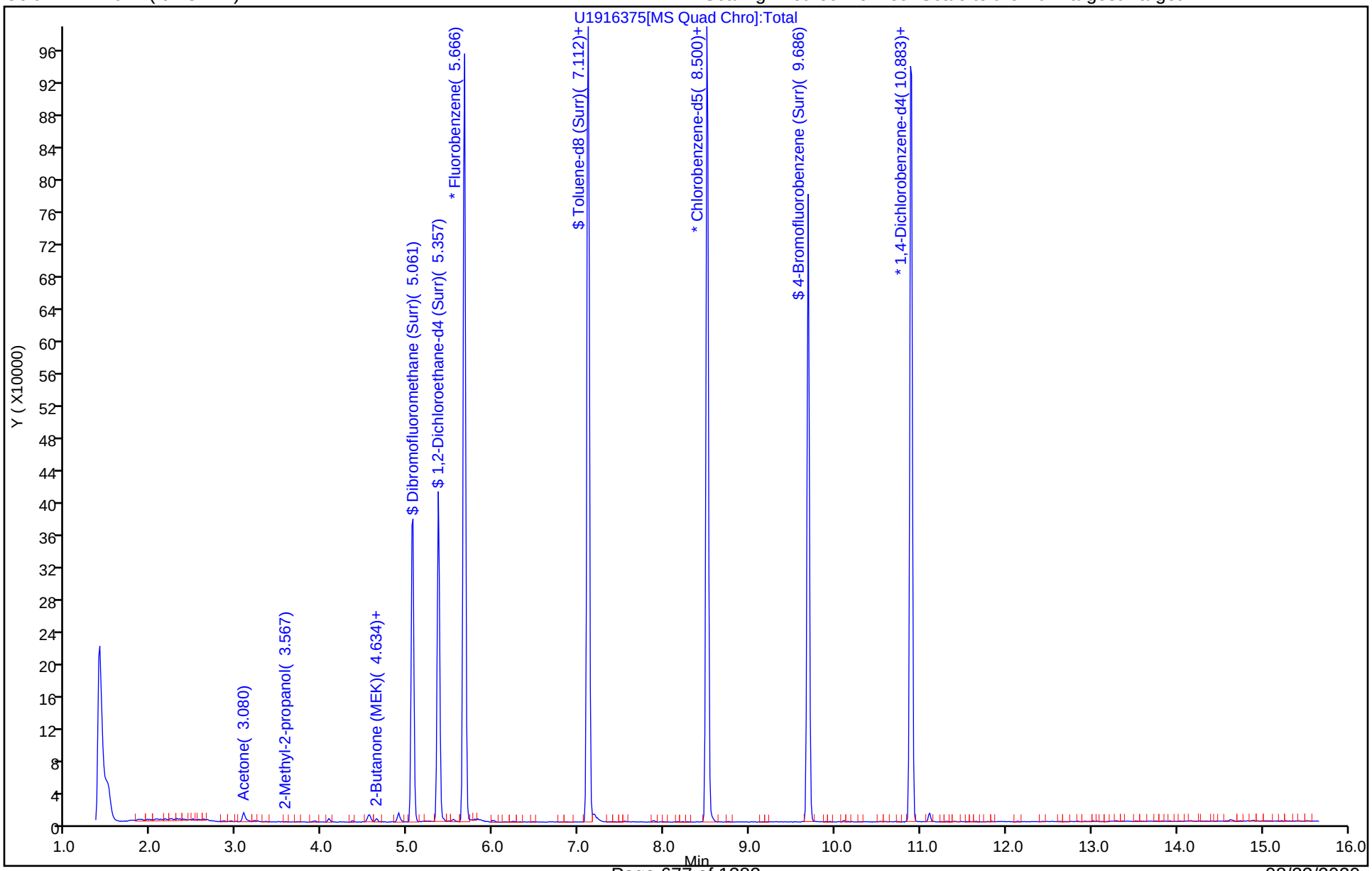
Report Date: 17-Aug-2020 14:40:55 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916375.d

Injection Date:	14-Aug-2020 23:20:11	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-20	Lab Sample ID:	240-134931-20	Worklist Smp#:	18
Client ID:	MSA-SW42D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916375.d
Lims ID: 240-134931-B-20
Client ID: MSA-SW42D-081220
Sample Type: Client
Inject. Date: 14-Aug-2020 23:20:11 ALS Bottle#: 0 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-018
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:40:31 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:40:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	105.99
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.0	104.90
$ 6 Toluene-d8 (Surr)	20.0	21.0	105.09
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	10		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43A-081220 Lab Sample ID: 240-134931-21

Matrix: Water Lab File ID: U1916376.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:03

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 23:42

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916376.d
Lims ID: 240-134931-C-21
Client ID: MSA-SW43A-081220
Sample Type: Client
Inject. Date: 14-Aug-2020 23:42:35 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-019
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:40:31 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:41:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	925817	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	677265	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	342636	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	260804	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	296067	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	846096	20.8	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	285948	18.7	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62	1.918	1.907	0.011	94	3007	0.2180	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	99	36699	10.1	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.579	3.579	-0.001	14	411	0.3279	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	73	3763	0.2812	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	98	2424	1.11	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	93	2992	0.2045	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

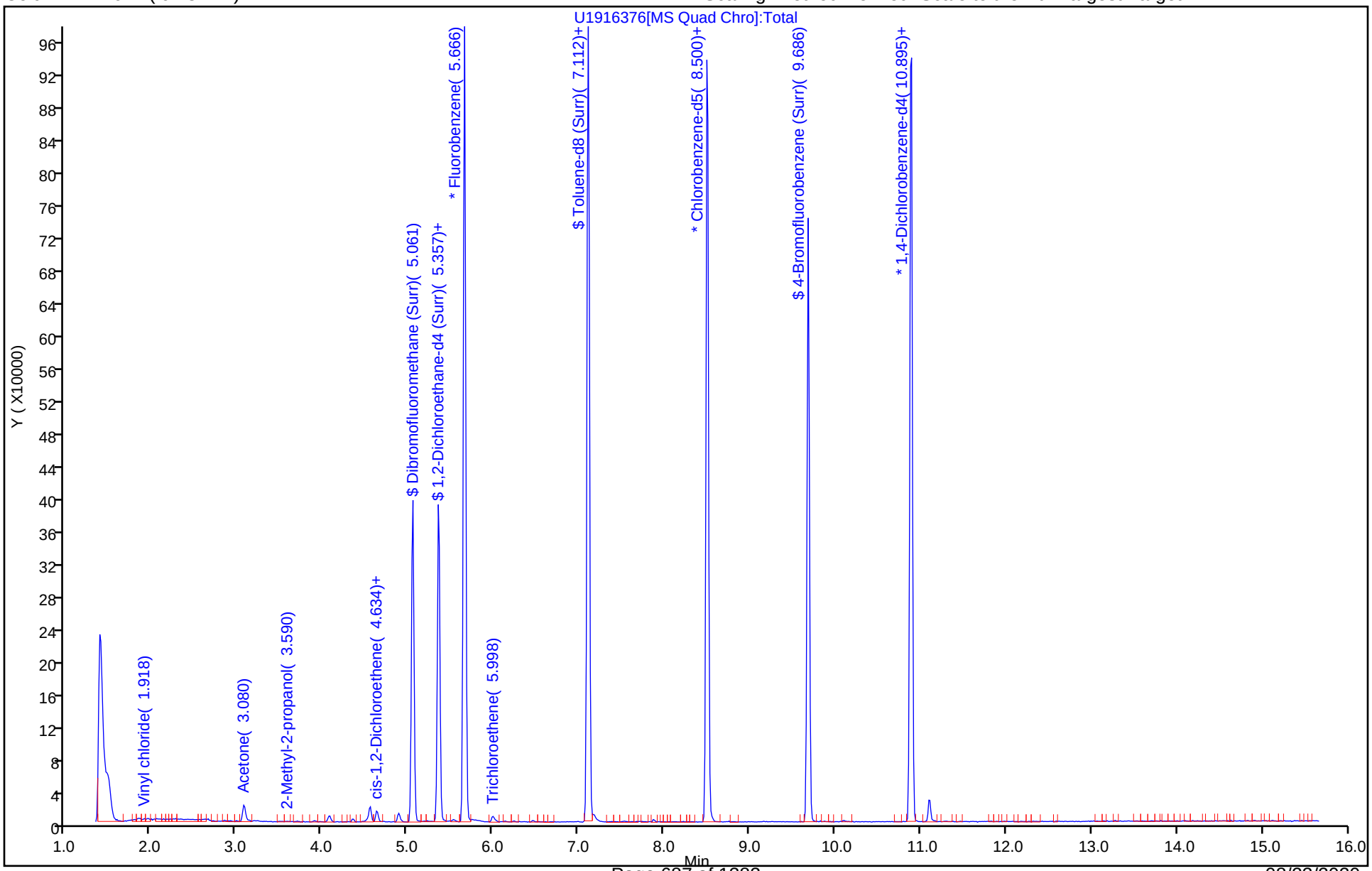
Report Date: 17-Aug-2020 14:41:21 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916376.d

Injection Date:	14-Aug-2020 23:42:35	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-21	Lab Sample ID:	240-134931-21	Worklist Smp#:	19
Client ID:	MSA-SW43A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916376.d
Lims ID: 240-134931-C-21
Client ID: MSA-SW43A-081220
Sample Type: Client
Inject. Date: 14-Aug-2020 23:42:35 ALS Bottle#: 0 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-019
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:40:31 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

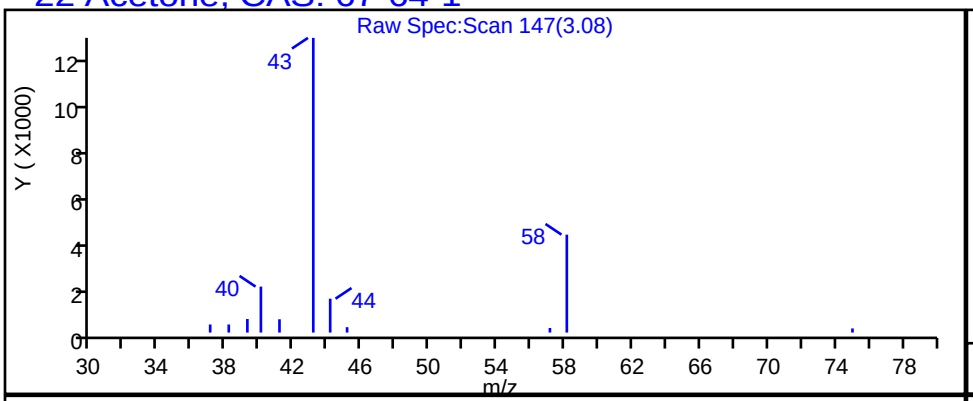
First Level Reviewer: laveyt Date: 17-Aug-2020 14:41:20

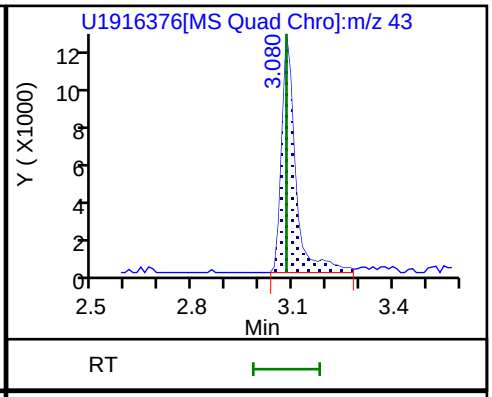
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.64
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.43
$ 6 Toluene-d8 (Surr)	20.0	20.8	104.17
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.56

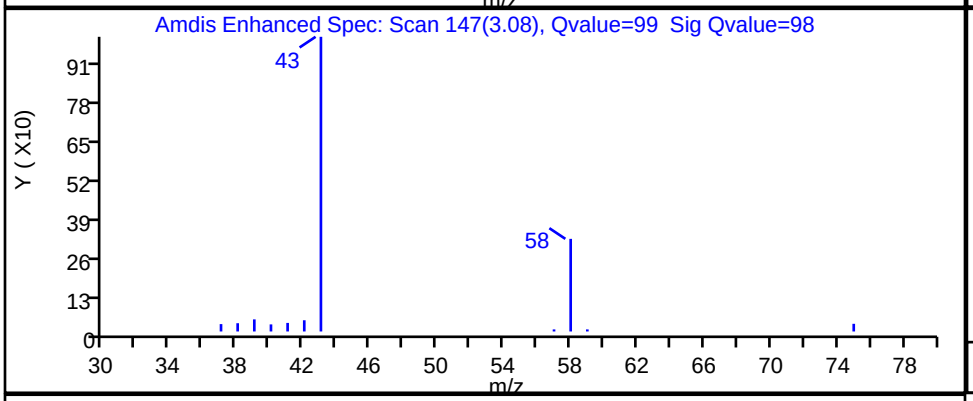
Eurofins TestAmerica, Canton

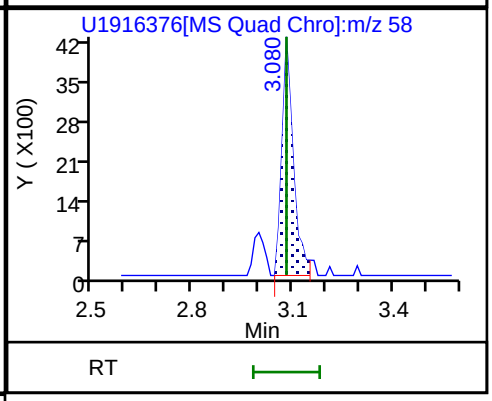
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916376.d		
Injection Date:	14-Aug-2020 23:42:35	Instrument ID:	A3UX19
Lims ID:	240-134931-C-21	Lab Sample ID:	240-134931-21
Client ID:	MSA-SW43A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

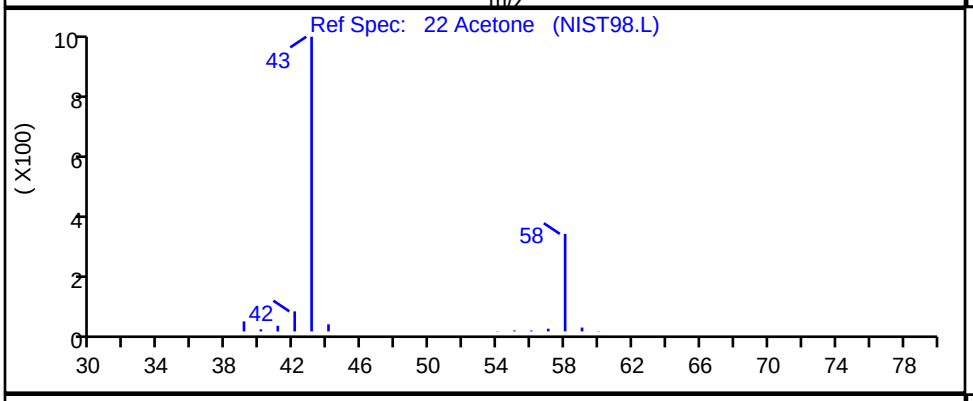
22 Acetone, CAS: 67-64-1

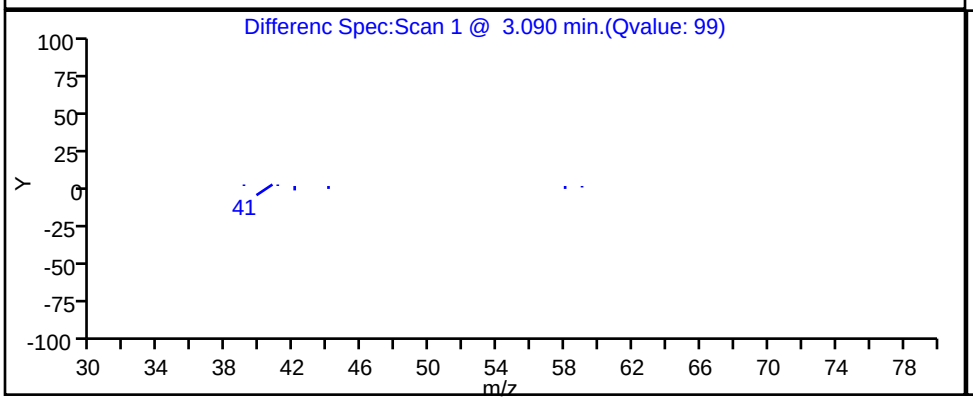


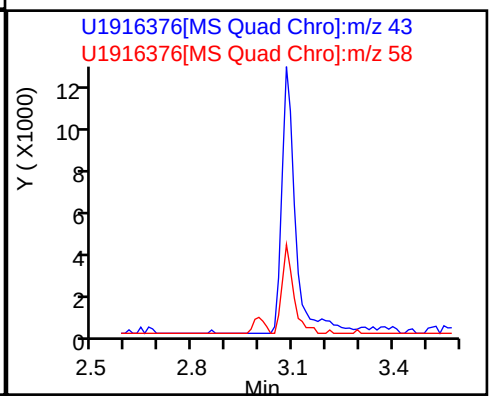












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	9.1		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43B-081220 Lab Sample ID: 240-134931-22

Matrix: Water Lab File ID: U1916377.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916377.d
Lims ID: 240-134931-B-22
Client ID: MSA-SW43B-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 00:04:51 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-020
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:42:23 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:42:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	934195	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	695083	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	352618	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	265348	21.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	301699	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	875036	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	295065	18.8	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	U
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	100	33211	9.07	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.602	3.579	0.023	6	443	0.3502	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	72	3069	0.2273	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	99	2262	1.03	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	91	2180	0.1477	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

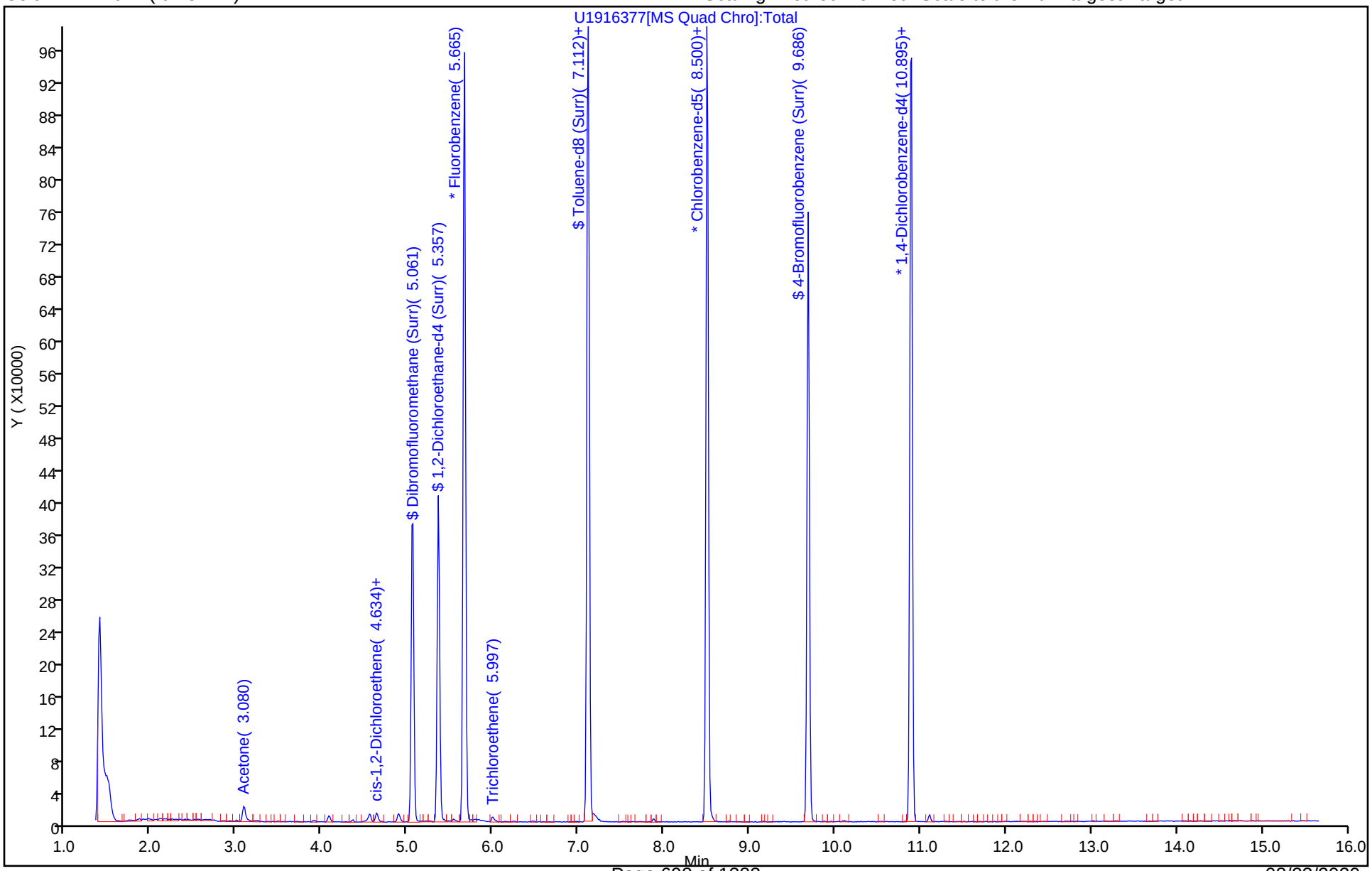
Report Date: 17-Aug-2020 14:42:24 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916377.d

Injection Date:	15-Aug-2020 00:04:51	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-22	Lab Sample ID:	240-134931-22	Worklist Smp#:	20
Client ID:	MSA-SW43B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916377.d
Lims ID: 240-134931-B-22
Client ID: MSA-SW43B-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 00:04:51 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-020
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:42:23 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:42:23

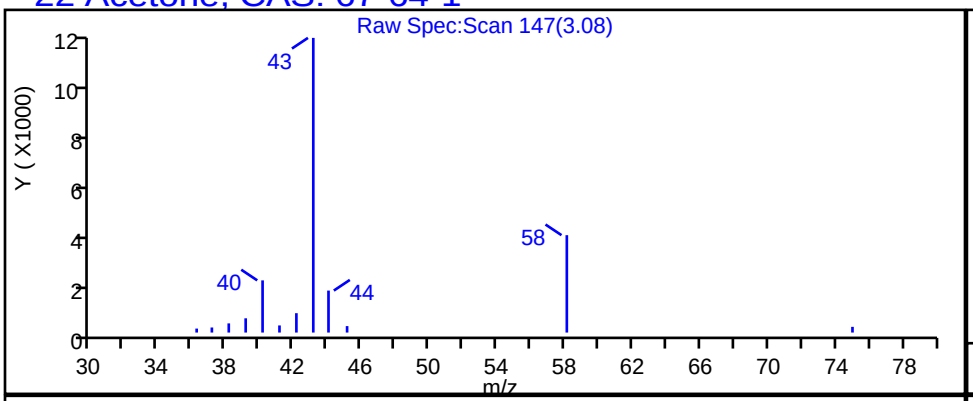
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.51
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.45
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.97
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.8	94.06

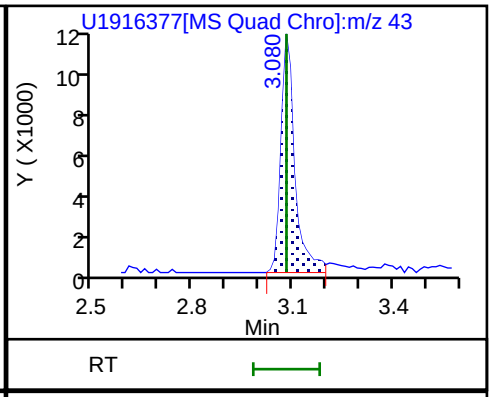
Eurofins TestAmerica, Canton

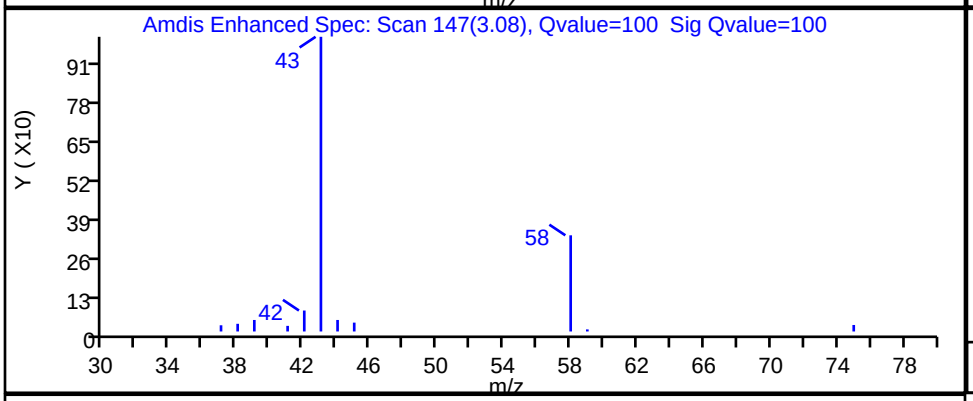
Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916377.d

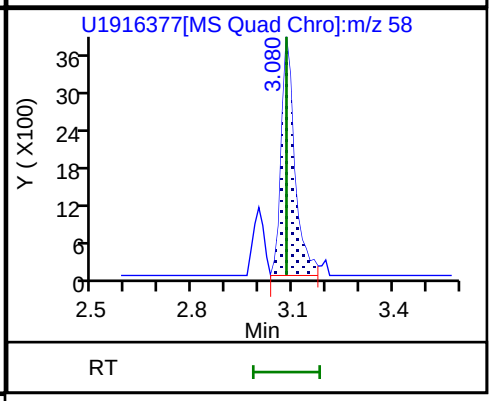
Injection Date:	15-Aug-2020 00:04:51	Instrument ID:	A3UX19
Lims ID:	240-134931-B-22	Lab Sample ID:	240-134931-22
Client ID:	MSA-SW43B-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

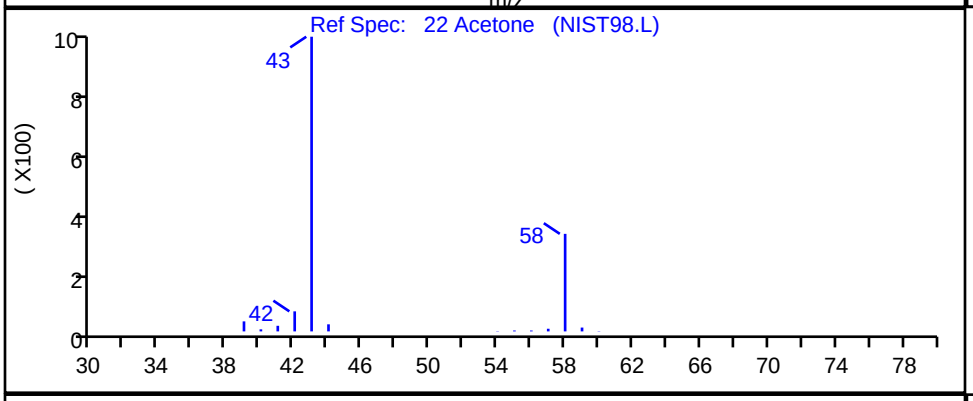
22 Acetone, CAS: 67-64-1

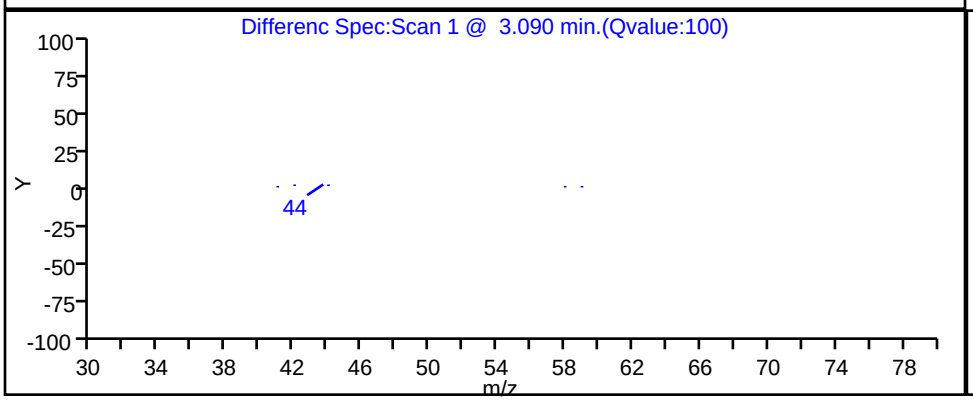


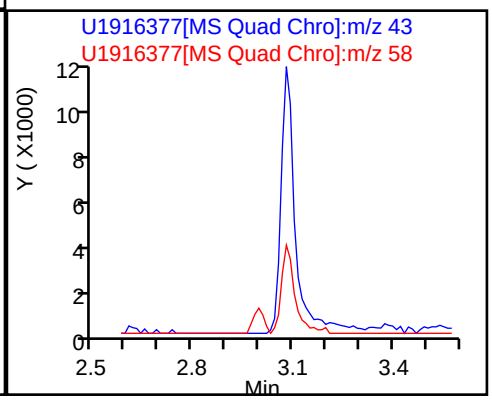












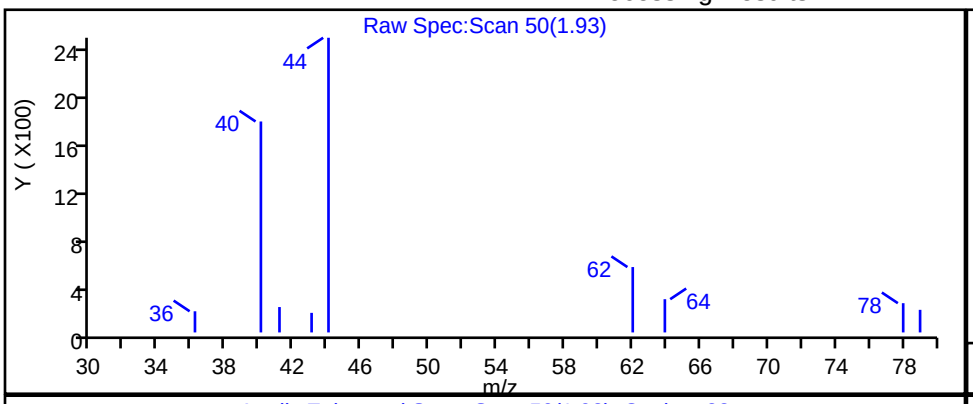
User Disabled Compound Report

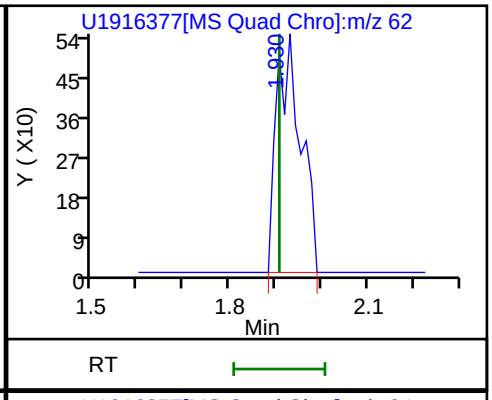
Eurofins TestAmerica, Canton

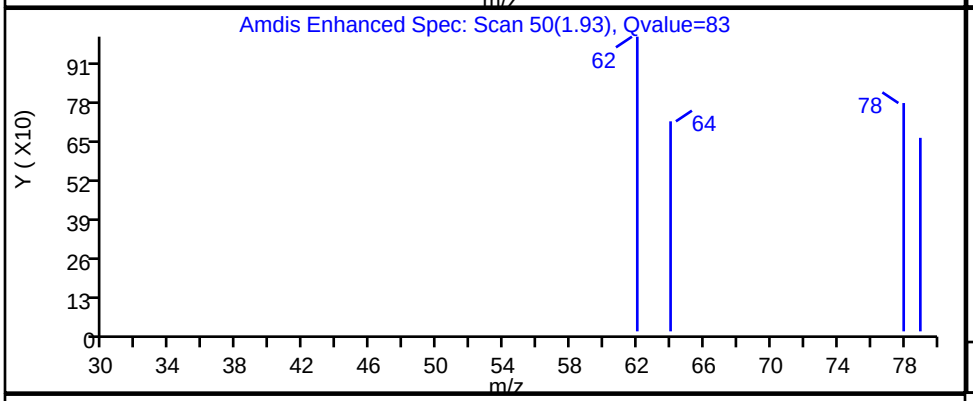
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916377.d				
Injection Date:	15-Aug-2020 00:04:51	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-22	Lab Sample ID:	240-134931-22		
Client ID:	MSA-SW43B-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

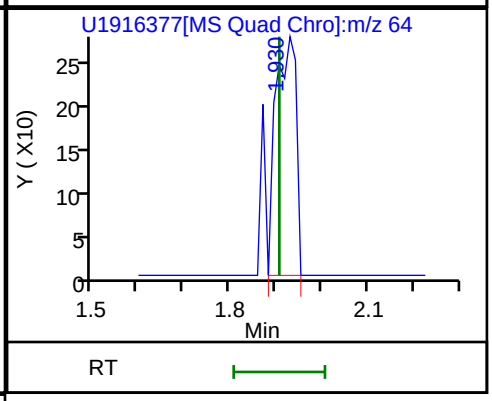
12 Vinyl chloride, CAS: 75-01-4

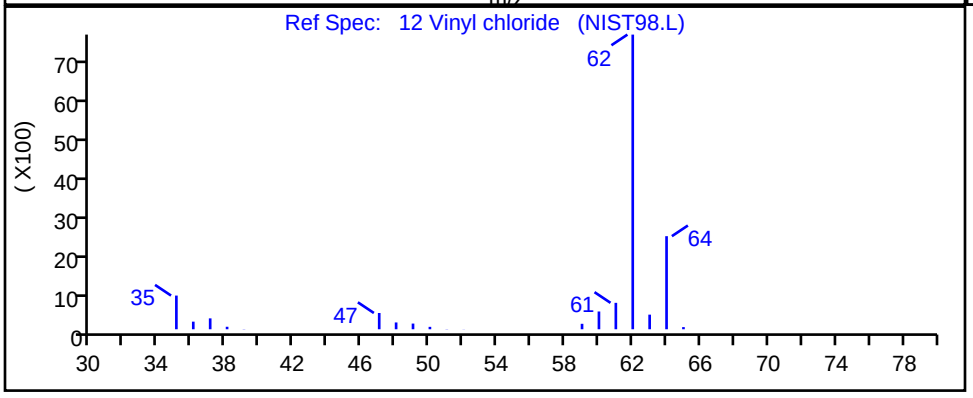
Processing Results











RT	Mass	Response	Amount
1.93	62.00	1988	0.142835
1.93	64.00	847	

Reviewer: laveyt, 17-Aug-2020 14:42:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	7.1		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43C-081220 Lab Sample ID: 240-134931-23

Matrix: Water Lab File ID: U1916378.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:07

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916378.d
Lims ID: 240-134931-B-23
Client ID: MSA-SW43C-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 00:27:16 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-021
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:42:23 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:42:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	920030	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	664768	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	343360	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	259200	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	294881	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	835580	21.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	277157	18.5	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62	1.930	1.907	0.023	14	1395	0.1018	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	99	25640	7.11	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.602	3.579	0.023	26	290	0.2328	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	64	1971	0.1482	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	1761	0.8106	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	89	1866	0.1284	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

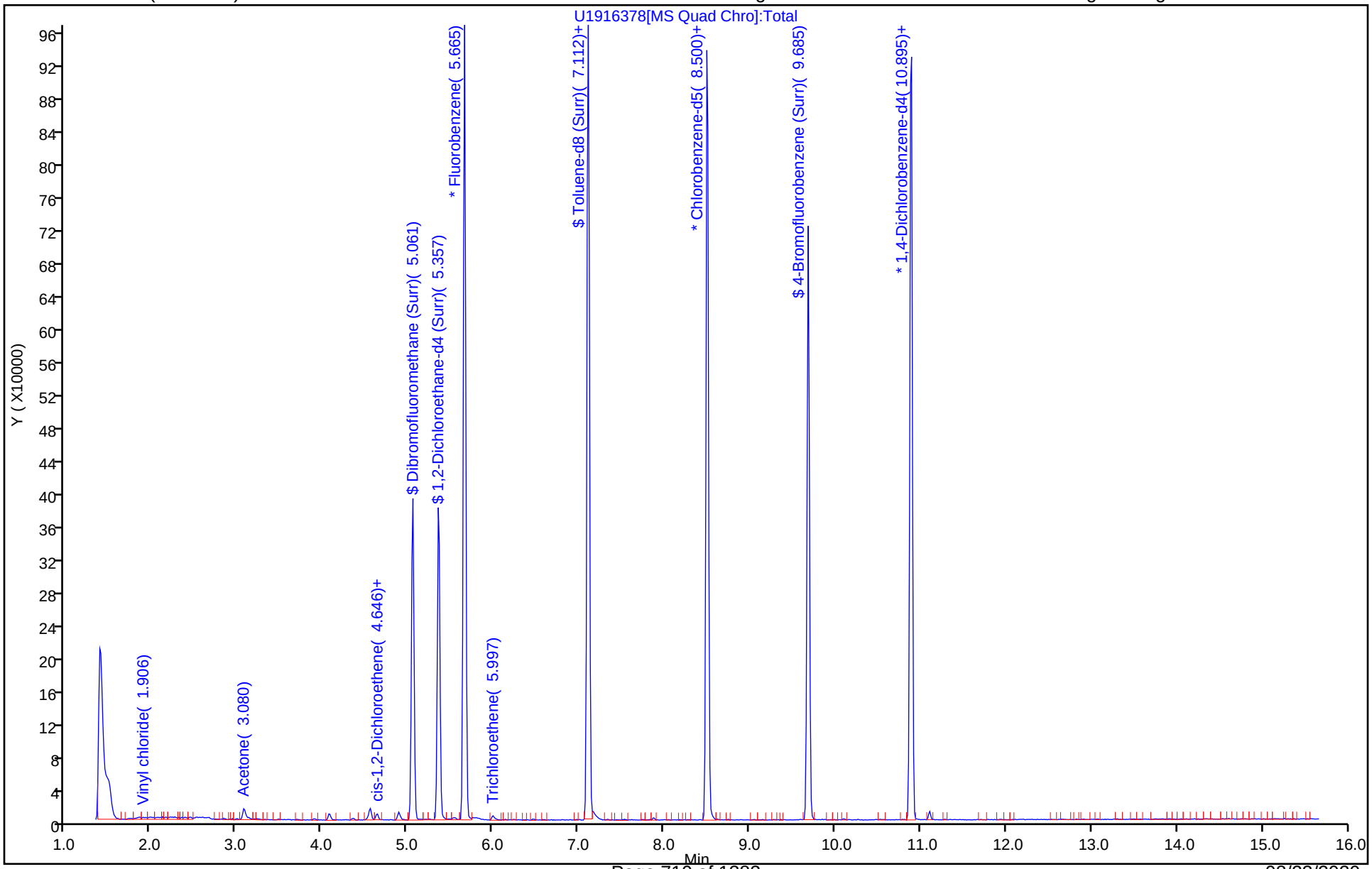
Report Date: 17-Aug-2020 14:42:59 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916378.d

Injection Date:	15-Aug-2020 00:27:16	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-23	Lab Sample ID:	240-134931-23	Worklist Smp#:	21
Client ID:	MSA-SW43C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916378.d
Lims ID: 240-134931-B-23
Client ID: MSA-SW43C-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 00:27:16 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-021
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:42:23 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:42:59

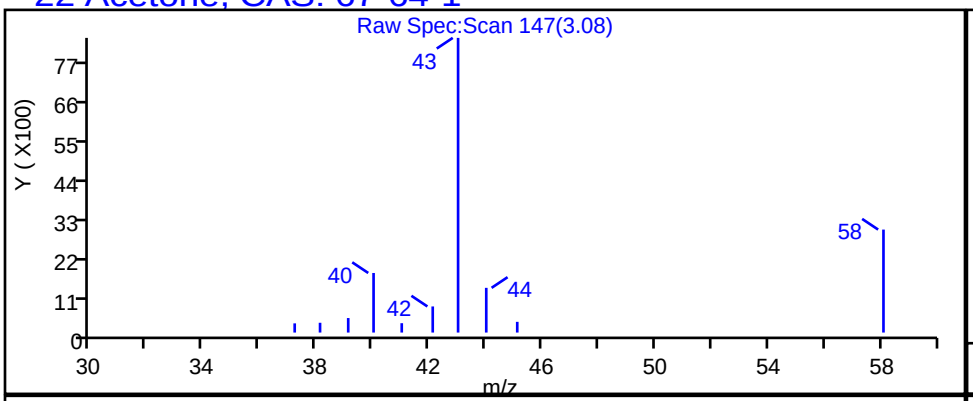
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.65
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.66
$ 6 Toluene-d8 (Surr)	20.0	21.0	104.81
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.39

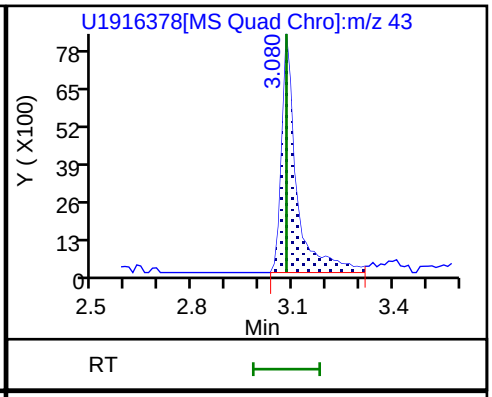
Eurofins TestAmerica, Canton

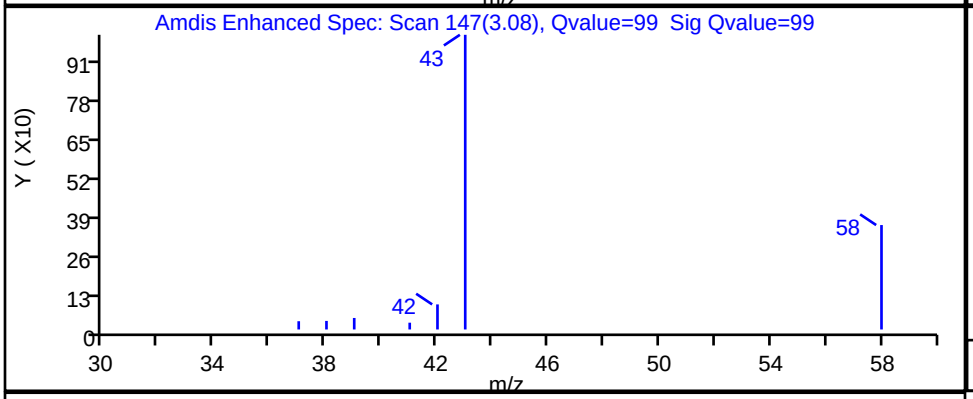
Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916378.d

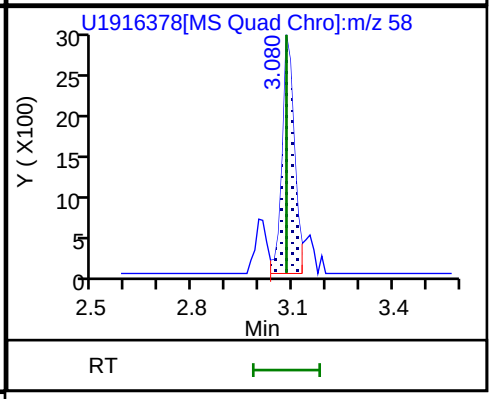
Injection Date:	15-Aug-2020 00:27:16	Instrument ID:	A3UX19
Lims ID:	240-134931-B-23	Lab Sample ID:	240-134931-23
Client ID:	MSA-SW43C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

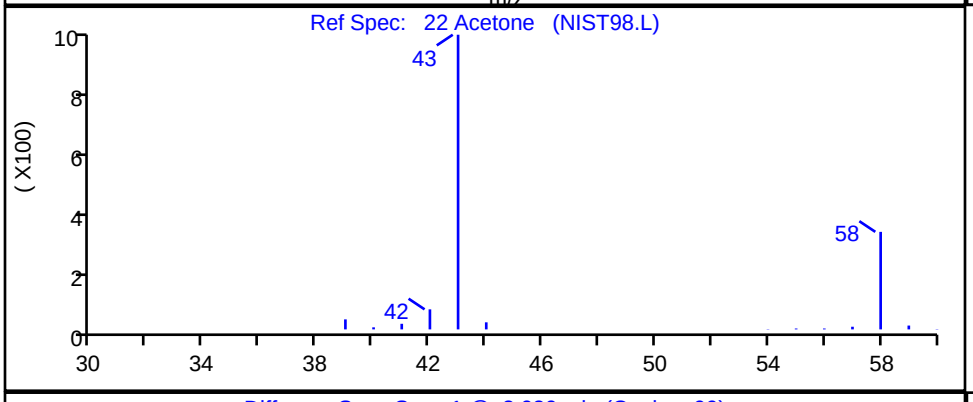
22 Acetone, CAS: 67-64-1

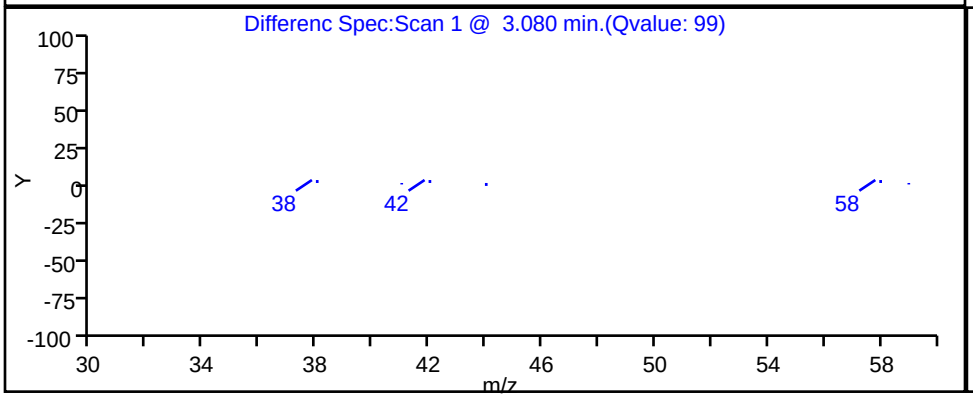


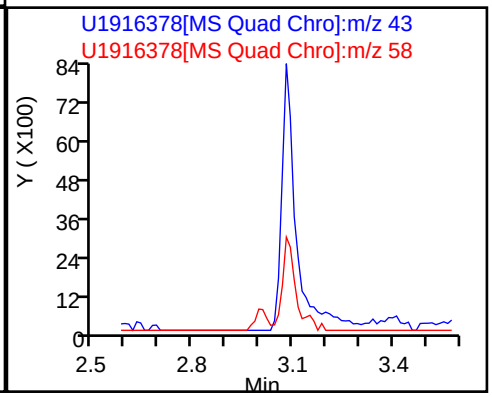












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	6.7		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW43D-081220 Lab Sample ID: 240-134931-24

Matrix: Water Lab File ID: U1916379.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:10

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 00:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916379.d
Lims ID: 240-134931-B-24
Client ID: MSA-SW43D-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 00:49:52 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-022
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:43:35 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:43:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	912701	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	677859	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	338931	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	252500	20.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	291650	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	834369	20.5	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	284780	18.6	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	U
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	100	23947	6.69	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.578	3.579	-0.001	25	432	0.3496	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	65	2056	0.1559	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1475	0.6844	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	93	2038	0.1413	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

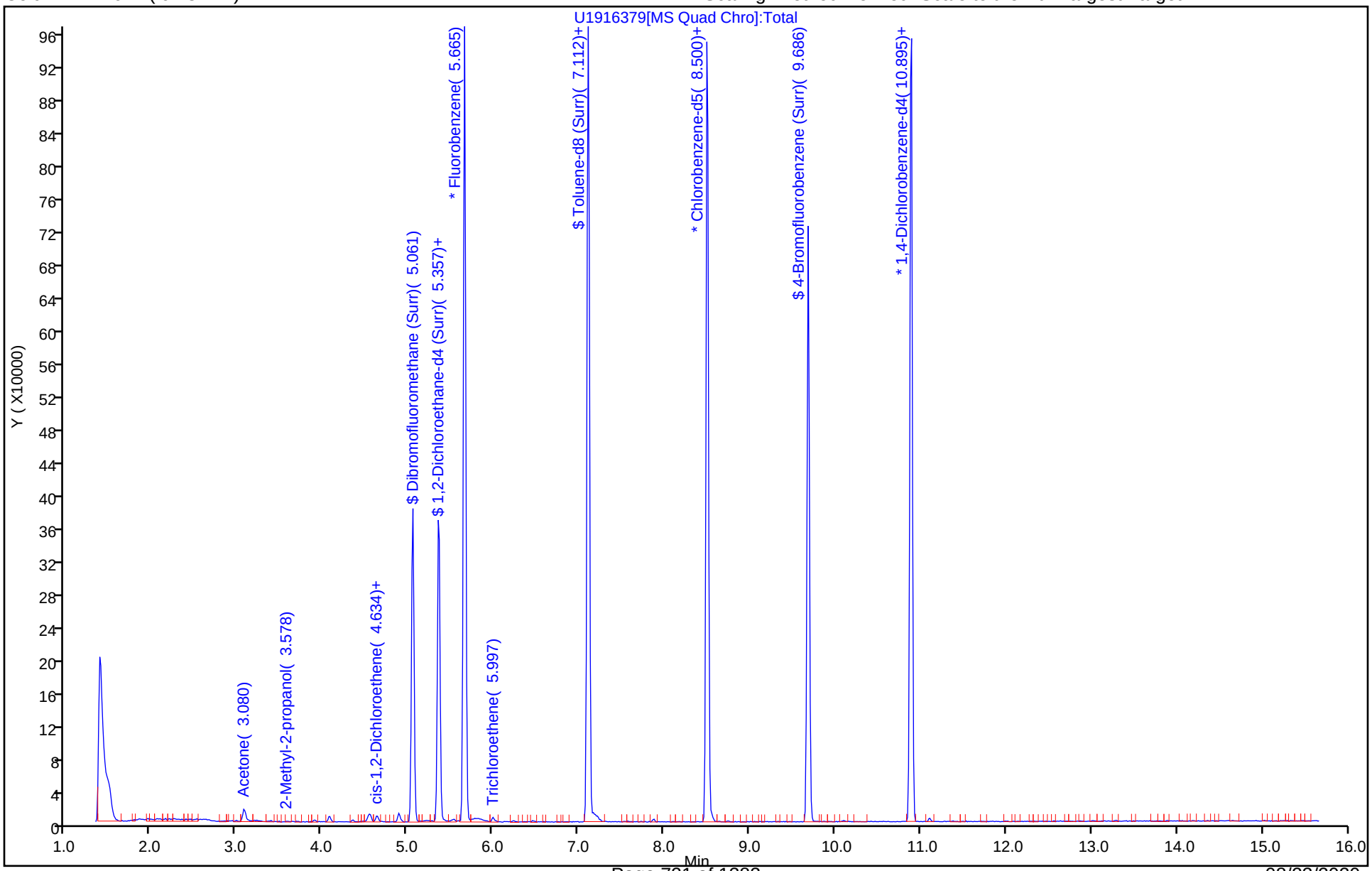
Report Date: 17-Aug-2020 14:43:35 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916379.d

Injection Date:	15-Aug-2020 00:49:52	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-24	Lab Sample ID:	240-134931-24	Worklist Smp#:	22
Client ID:	MSA-SW43D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916379.d
Lims ID: 240-134931-B-24
Client ID: MSA-SW43D-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 00:49:52 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-022
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:43:35 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:43:35

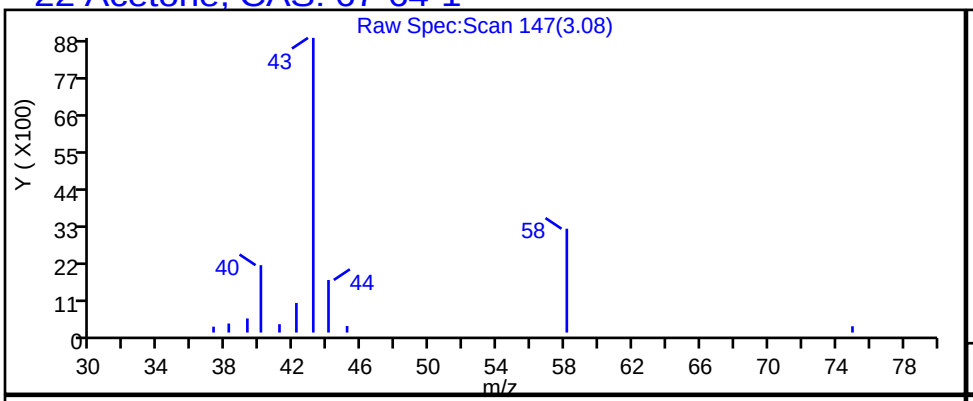
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.6	102.77
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.35
$ 6 Toluene-d8 (Surr)	20.0	20.5	102.64
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	93.09

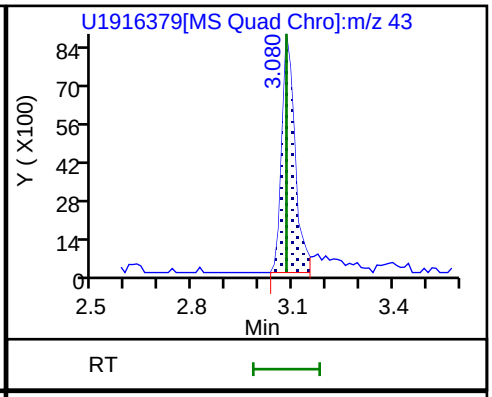
Eurofins TestAmerica, Canton

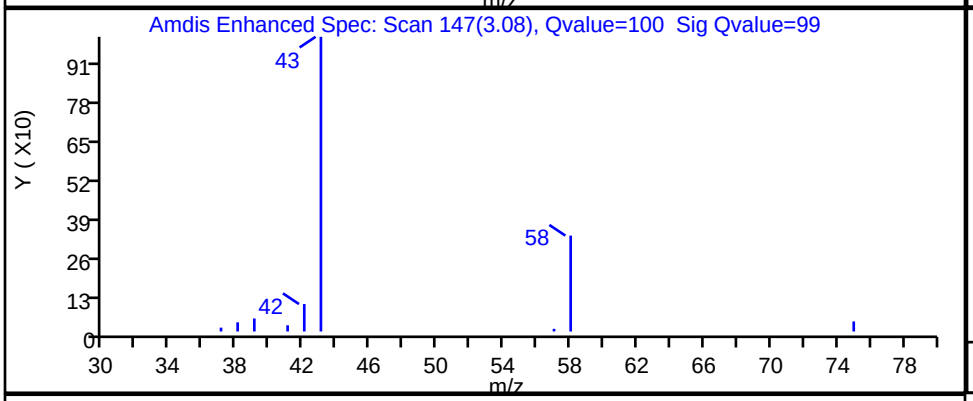
Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916379.d

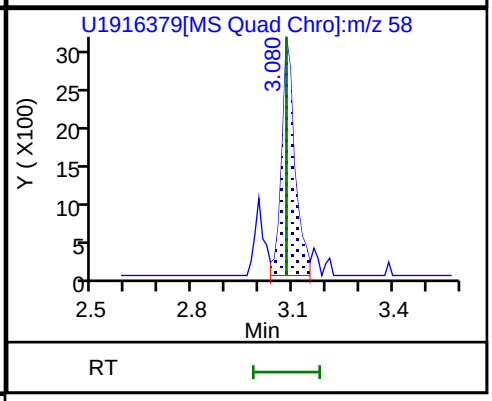
Injection Date:	15-Aug-2020 00:49:52	Instrument ID:	A3UX19
Lims ID:	240-134931-B-24	Lab Sample ID:	240-134931-24
Client ID:	MSA-SW43D-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

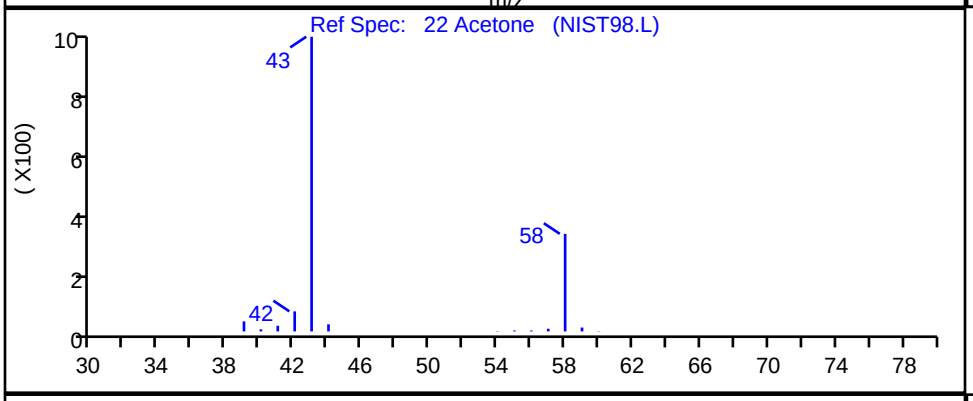
22 Acetone, CAS: 67-64-1

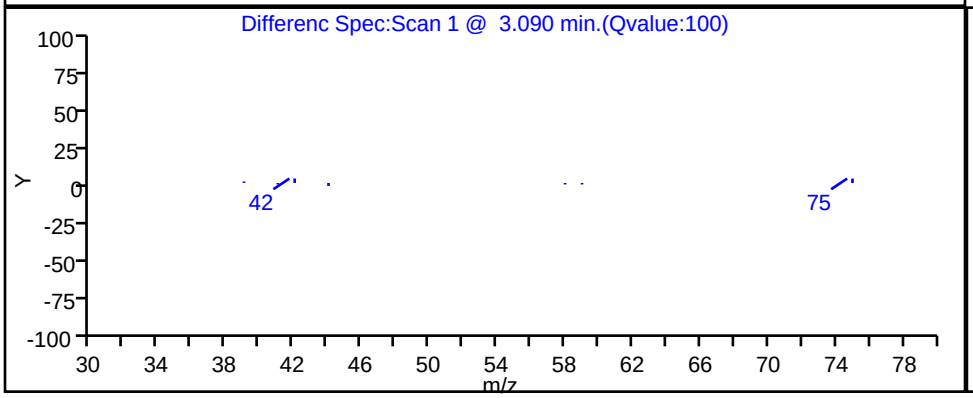


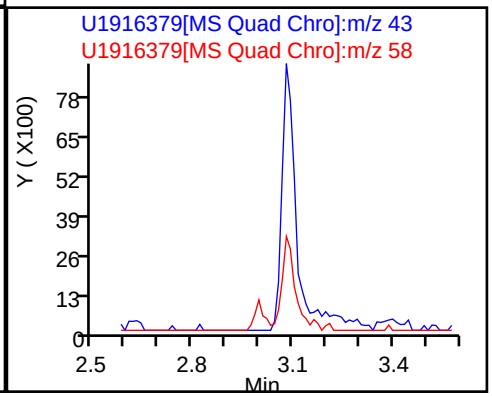












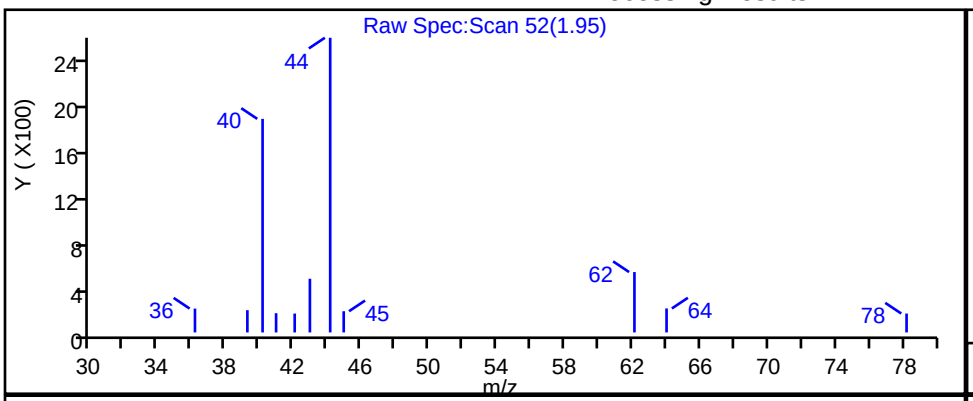
User Disabled Compound Report

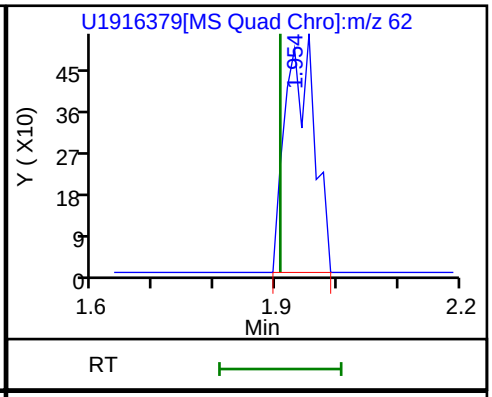
Eurofins TestAmerica, Canton

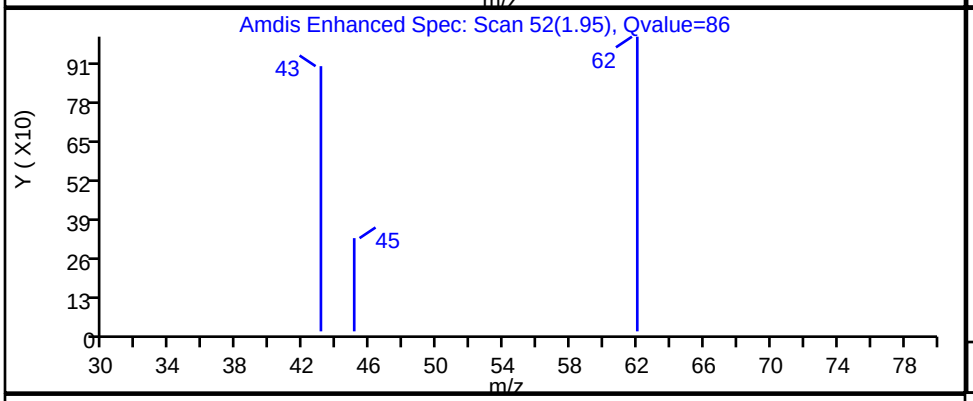
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916379.d				
Injection Date:	15-Aug-2020 00:49:52	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-24	Lab Sample ID:	240-134931-24		
Client ID:	MSA-SW43D-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

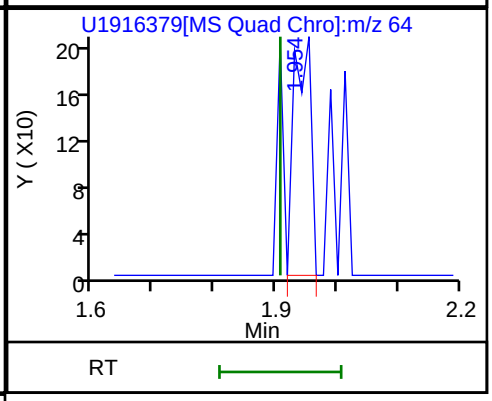
12 Vinyl chloride, CAS: 75-01-4

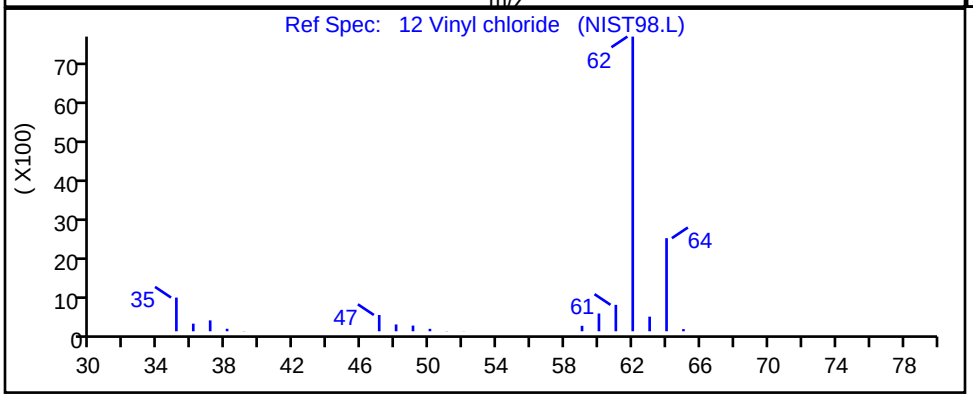
Processing Results











RT	Mass	Response	Amount
1.95	62.00	1705	0.125387
1.95	64.00	401	

Reviewer: laveyt, 17-Aug-2020 14:43:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	10		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	101		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44A-081220 Lab Sample ID: 240-134931-25

Matrix: Water Lab File ID: U1916380.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:12

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916380.d
Lims ID: 240-134931-C-25
Client ID: MSA-SW44A-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 01:12:16 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-023
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:44:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	927781	20.0	
* 2 Chlorobenzene-d5	117	8.499	8.500	-0.001	85	687470	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	344875	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.060	5.049	0.011	93	253047	20.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	290176	20.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	839930	20.4	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	283996	18.3	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	U
12 Vinyl chloride	62		1.907				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	99	37679	10.4	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59		3.579				ND	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	54	1765	0.1316	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	98	2367	1.08	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	89	3045	0.2077	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

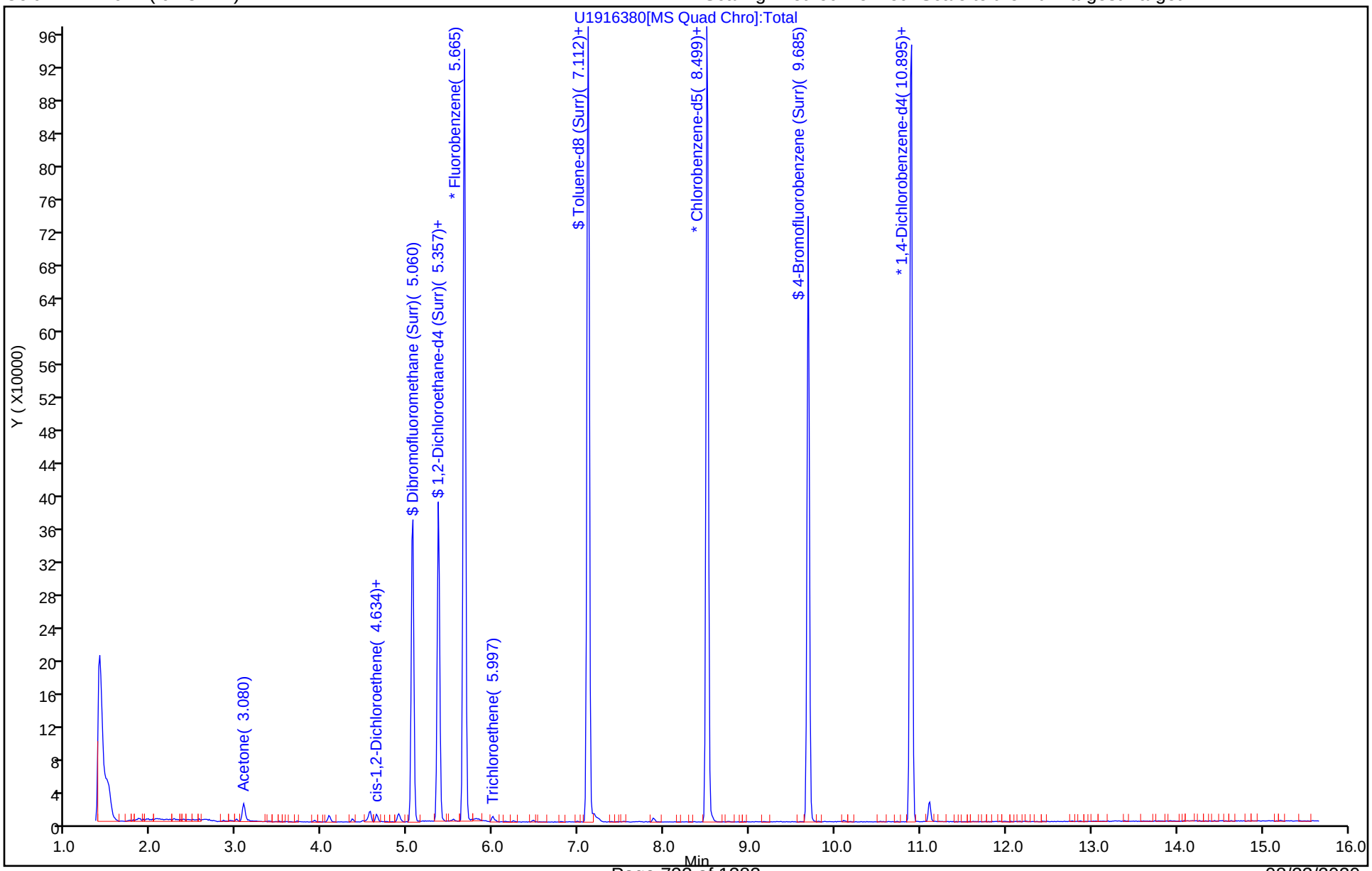
Report Date: 17-Aug-2020 14:44:04 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916380.d

Injection Date:	15-Aug-2020 01:12:16	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-25	Lab Sample ID:	240-134931-25	Worklist Smp#:	23
Client ID:	MSA-SW44A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916380.d
Lims ID: 240-134931-C-25
Client ID: MSA-SW44A-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 01:12:16 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-023
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:44:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.3	101.32
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.2	101.15
$ 6 Toluene-d8 (Surr)	20.0	20.4	101.88
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.3	91.54

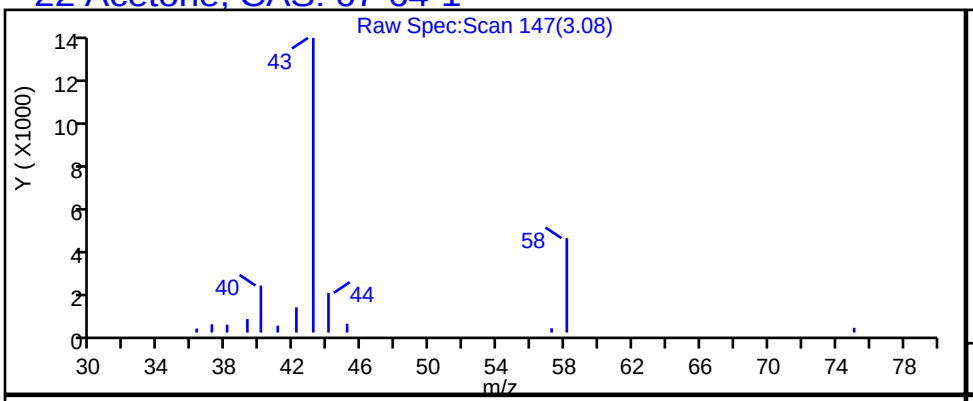
Report Date: 17-Aug-2020 14:44:04 Chrom Revision: 2.3 30-Jun-2020 12:05:54

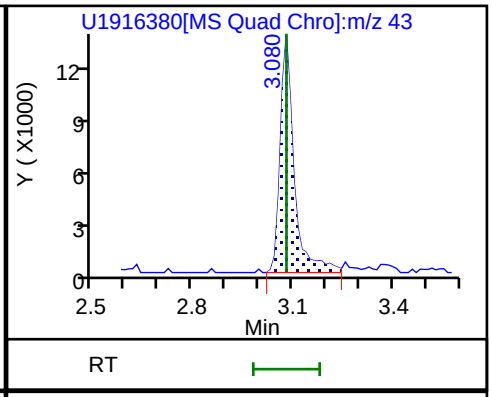
Eurofins TestAmerica, Canton

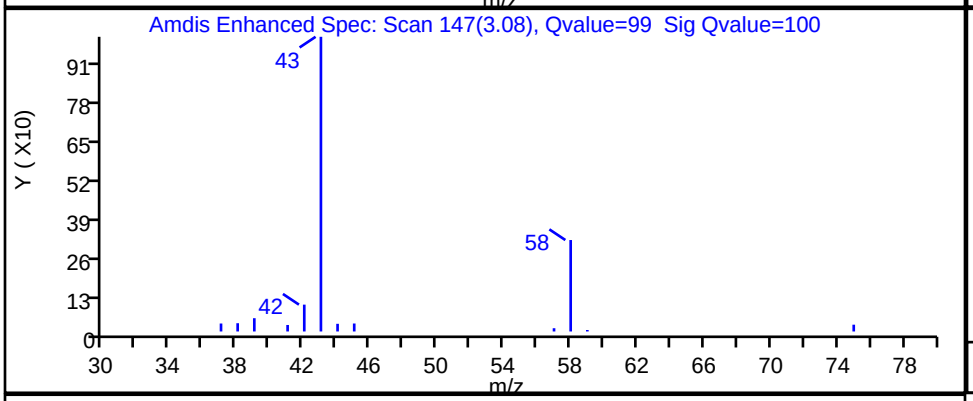
Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916380.d

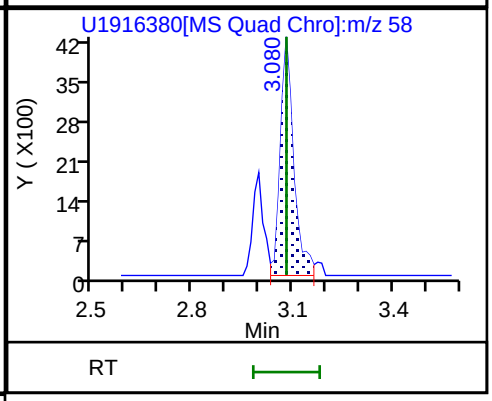
Injection Date:	15-Aug-2020 01:12:16	Instrument ID:	A3UX19
Lims ID:	240-134931-C-25	Lab Sample ID:	240-134931-25
Client ID:	MSA-SW44A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

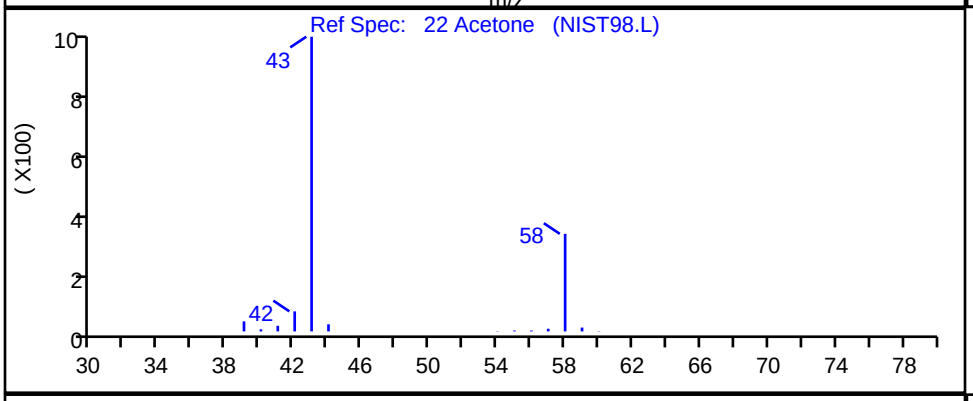
22 Acetone, CAS: 67-64-1

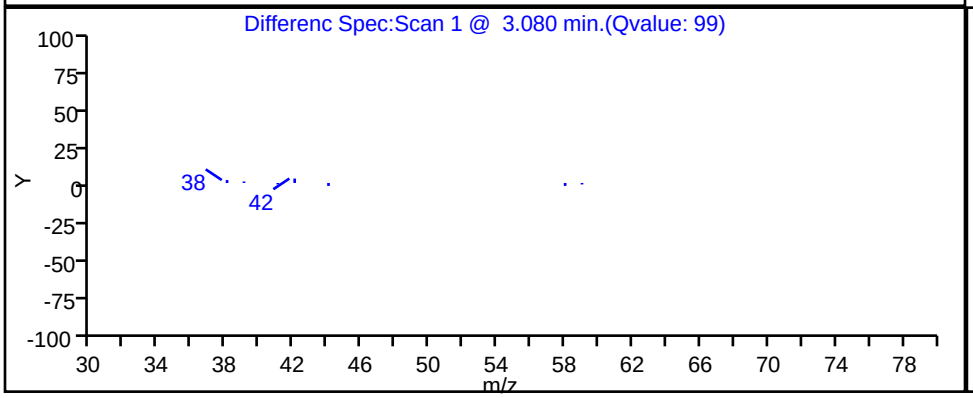


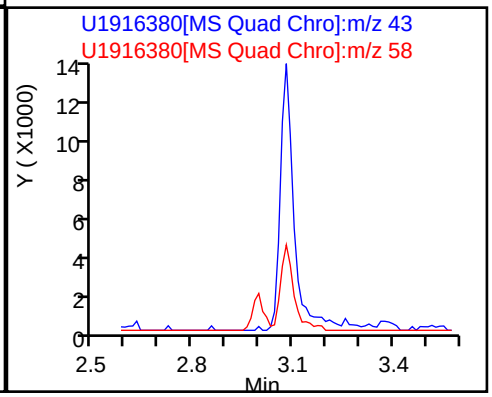












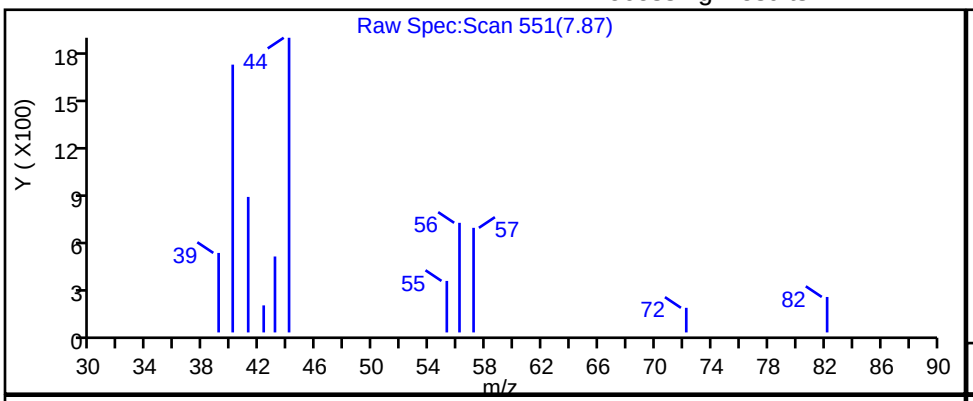
User Disabled Compound Report

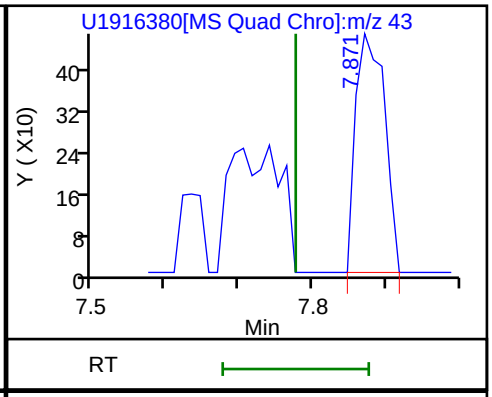
Eurofins TestAmerica, Canton

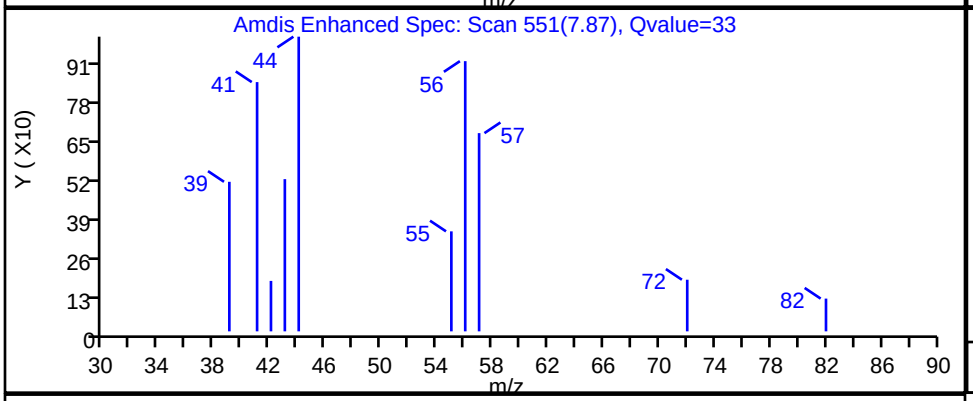
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916380.d				
Injection Date:	15-Aug-2020 01:12:16	Instrument ID:	A3UX19		
Lims ID:	240-134931-C-25	Lab Sample ID:	240-134931-25		
Client ID:	MSA-SW44A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

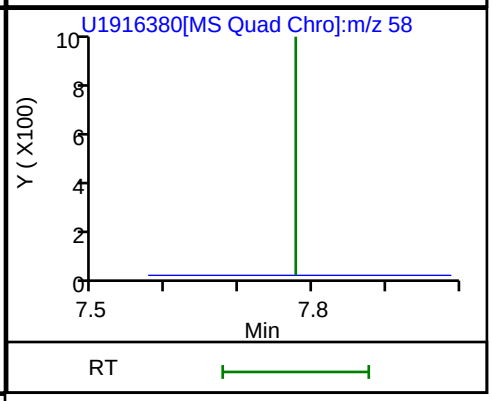
77 2-Hexanone, CAS: 591-78-6

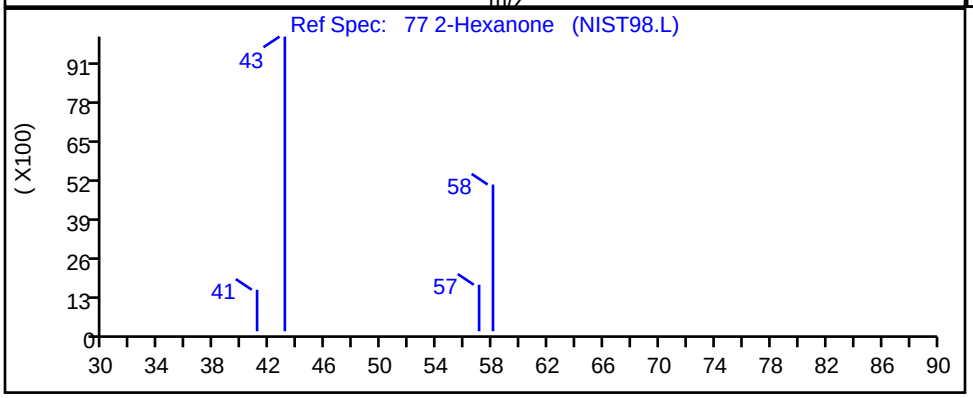
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1291	0.119273
7.78	58.00	0	

Reviewer: laveyt, 17-Aug-2020 14:43:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

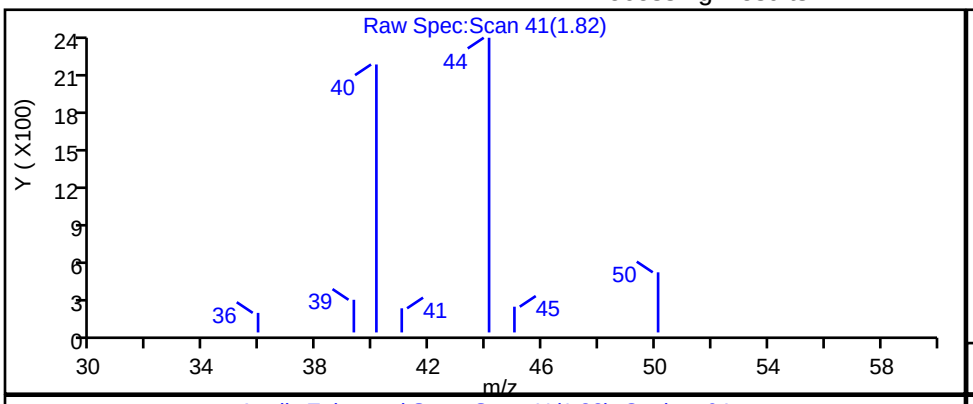
User Disabled Compound Report

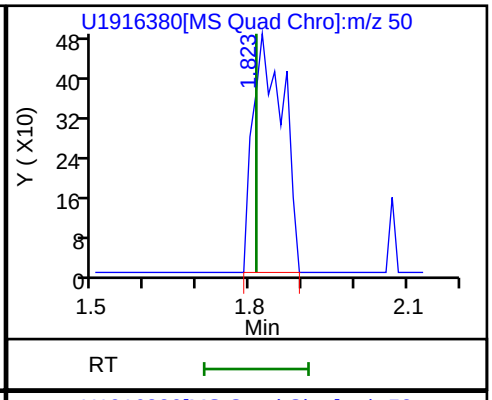
Eurofins TestAmerica, Canton

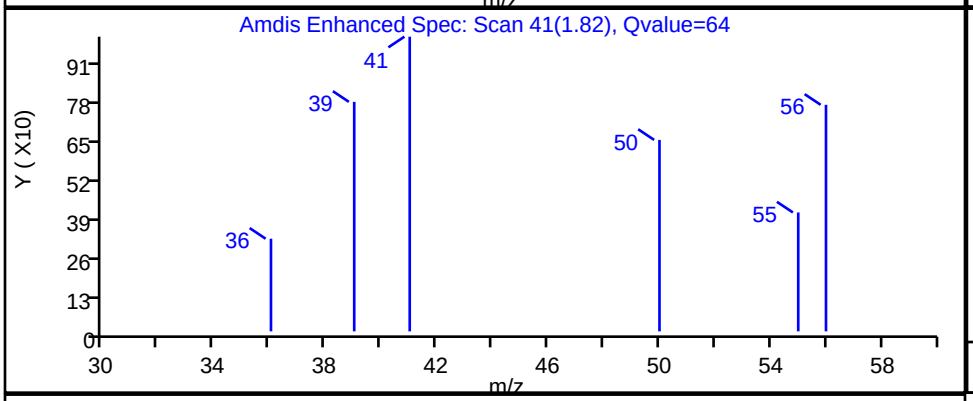
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916380.d				
Injection Date:	15-Aug-2020 01:12:16	Instrument ID:	A3UX19		
Lims ID:	240-134931-C-25	Lab Sample ID:	240-134931-25		
Client ID:	MSA-SW44A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

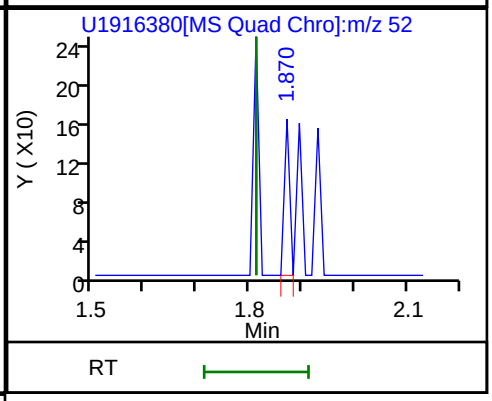
10 Chloromethane, CAS: 74-87-3

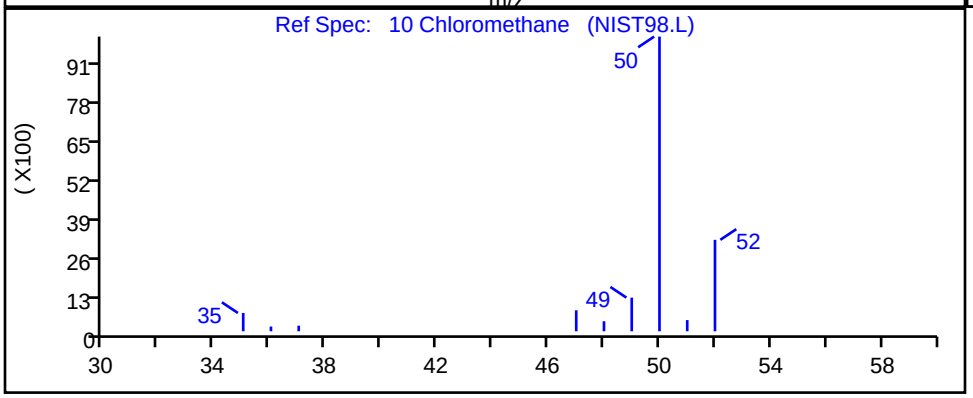
Processing Results











RT	Mass	Response	Amount
1.82	50.00	1964	0.146831
1.87	52.00	113	

Reviewer: laveyt, 17-Aug-2020 14:43:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	6.6		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	95		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44B-081220 Lab Sample ID: 240-134931-26

Matrix: Water Lab File ID: U1916381.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:51

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916381.d
Lims ID: 240-134931-B-26
Client ID: MSA-SW44B-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 01:34:41 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:44:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	903726	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	87	663614	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	330950	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	258383	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	97	299342	21.4	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	841791	21.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	284241	19.0	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	99	23546	6.65	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59		3.579				ND	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	1899	0.8899	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	92	1695	0.1187	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

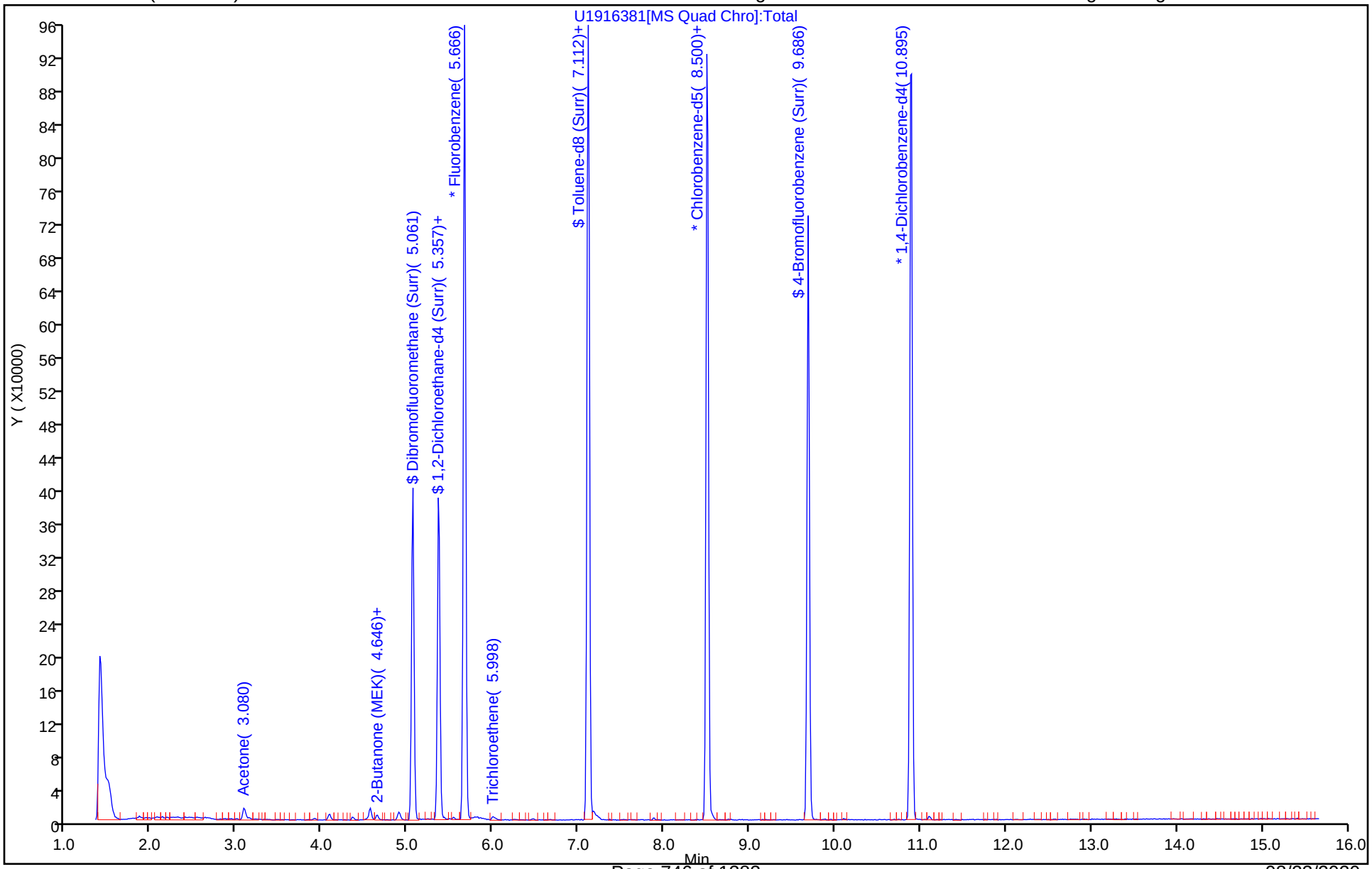
Report Date: 17-Aug-2020 14:44:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916381.d

Injection Date:	15-Aug-2020 01:34:41	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-26	Lab Sample ID:	240-134931-26	Worklist Smp#:	24
Client ID:	MSA-SW44B-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916381.d
Lims ID: 240-134931-B-26
Client ID: MSA-SW44B-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 01:34:41 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

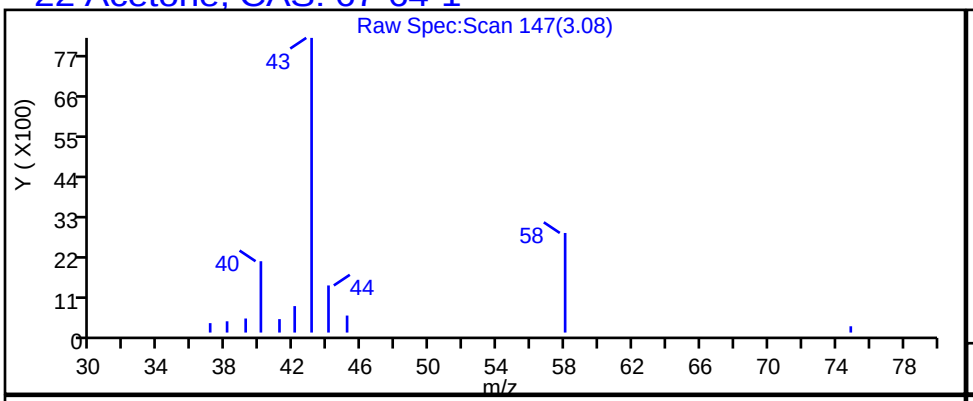
First Level Reviewer: laveyt Date: 17-Aug-2020 14:44:40

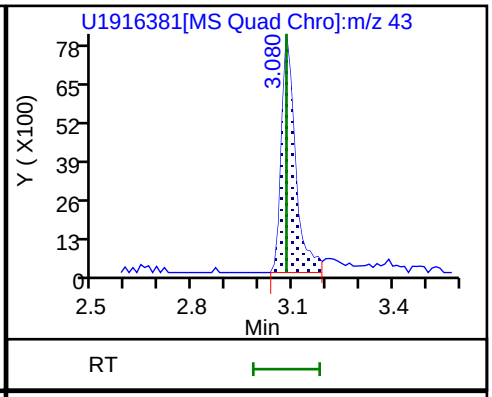
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	106.21
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.4	107.13
$ 6 Toluene-d8 (Surr)	20.0	21.2	105.77
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.0	94.91

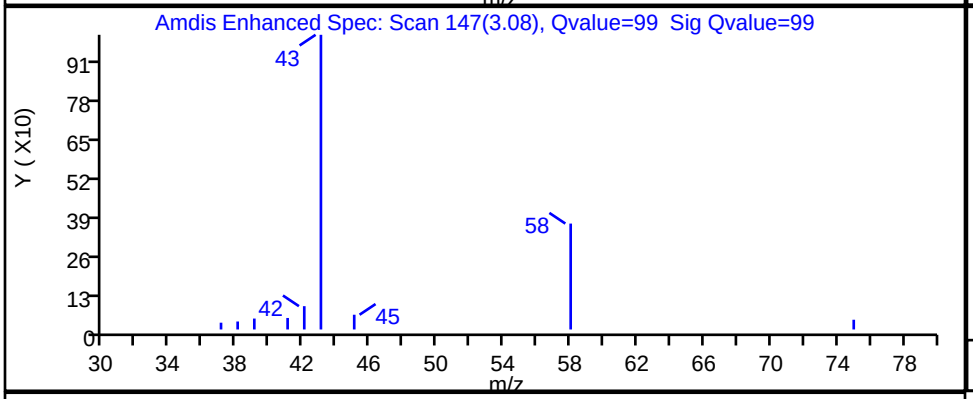
Eurofins TestAmerica, Canton

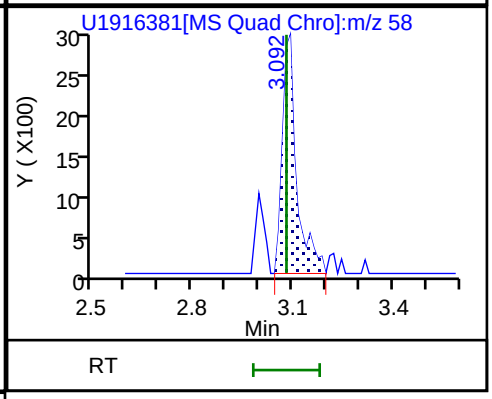
Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916381.d
Injection Date: 15-Aug-2020 01:34:41 Instrument ID: A3UX19
Lims ID: 240-134931-B-26 Lab Sample ID: 240-134931-26
Client ID: MSA-SW44B-081220
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

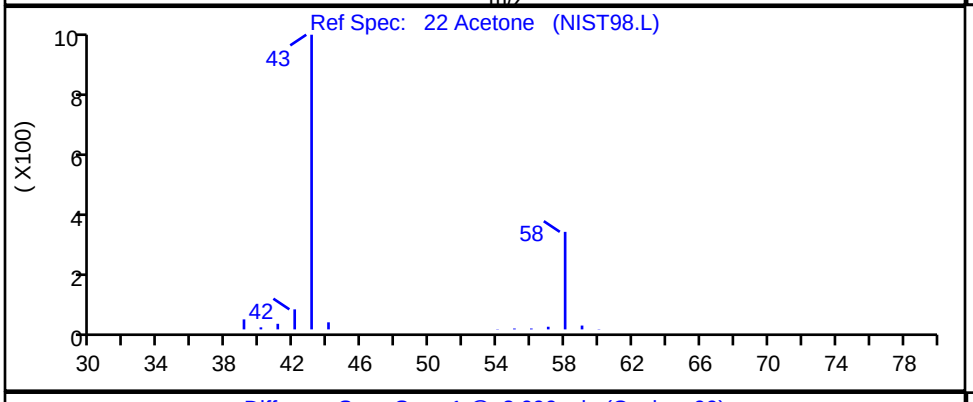
22 Acetone, CAS: 67-64-1

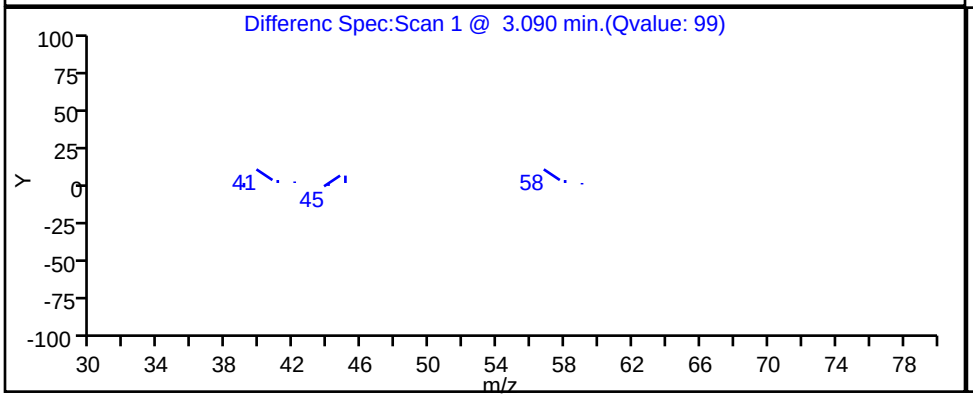


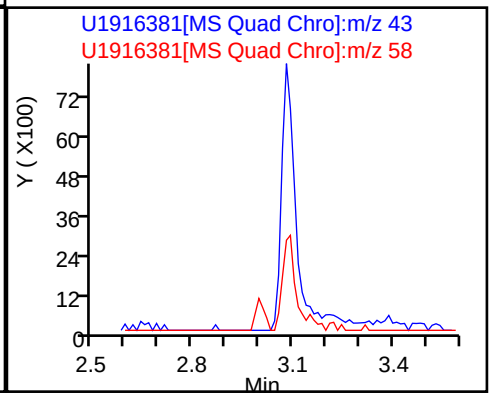












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	6.3		5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44C-081220 Lab Sample ID: 240-134931-27

Matrix: Water Lab File ID: U1916382.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:54

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 01:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916382.d
Lims ID: 240-134931-B-27
Client ID: MSA-SW44C-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 01:57:04 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:45:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	905539	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	673435	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	336744	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	93	254782	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	97	292846	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	835855	20.7	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	282791	18.6	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	100	22212	6.26	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.590	3.579	0.011	33	429	0.3499	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	1430	0.6688	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

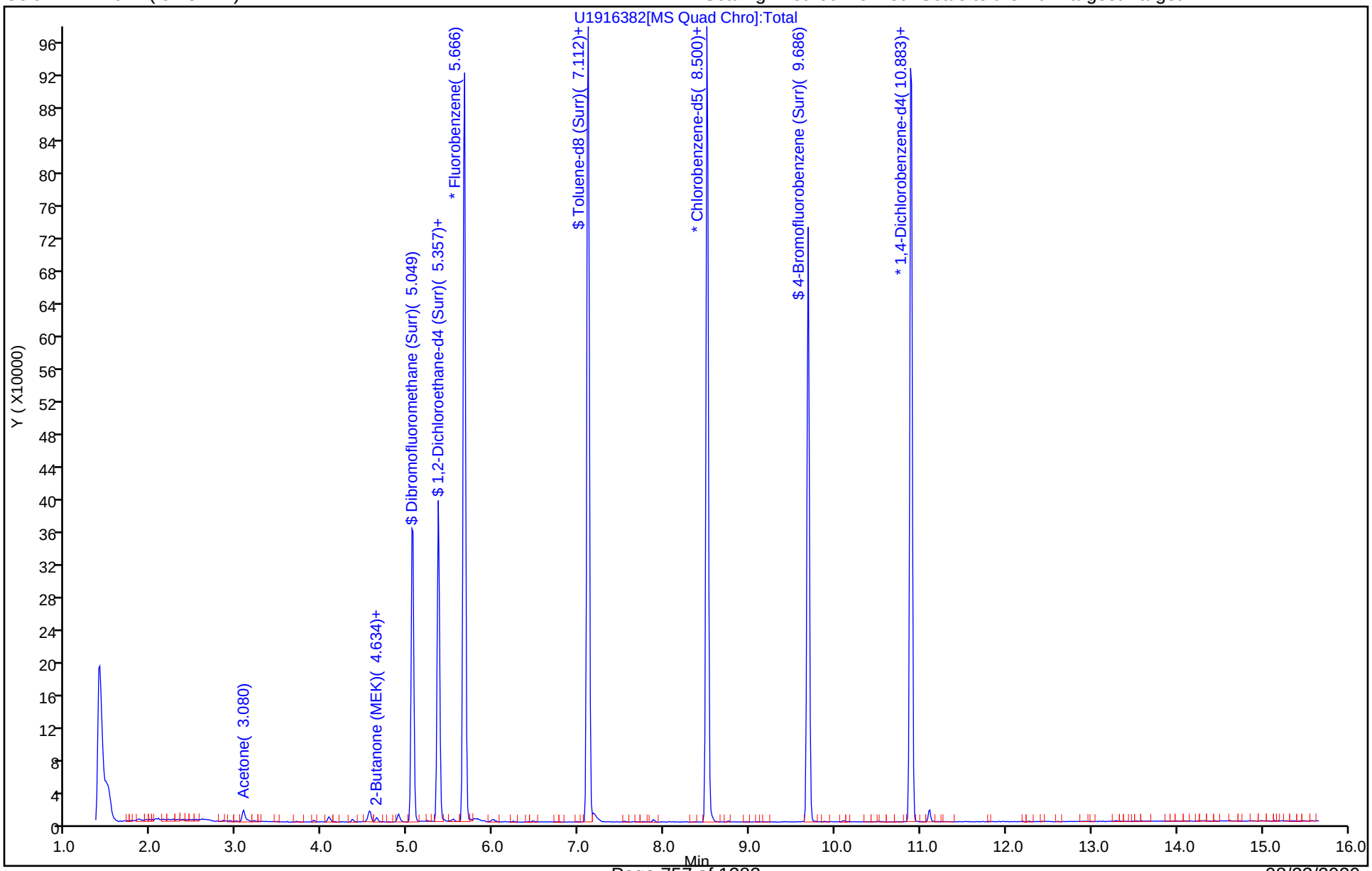
Report Date: 17-Aug-2020 14:45:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916382.d

Injection Date:	15-Aug-2020 01:57:04	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-27	Lab Sample ID:	240-134931-27	Worklist Smp#:	25
Client ID:	MSA-SW44C-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916382.d
Lims ID: 240-134931-B-27
Client ID: MSA-SW44C-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 01:57:04 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:45:00

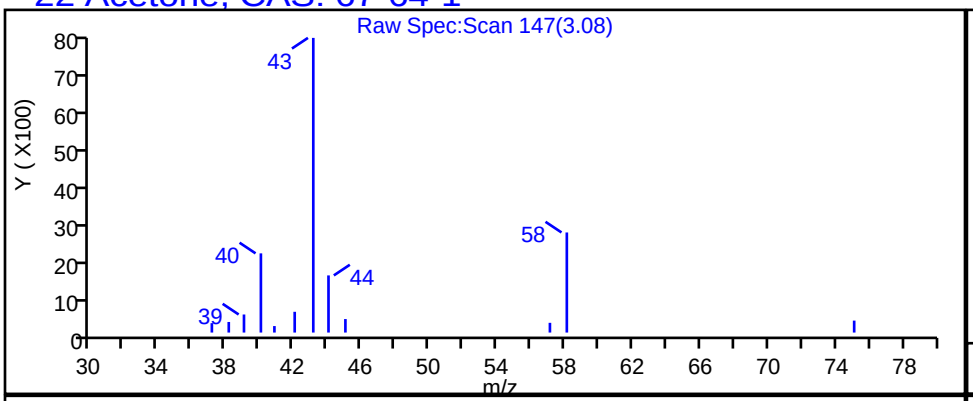
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.52
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.59
$ 6 Toluene-d8 (Surr)	20.0	20.7	103.49
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	93.05

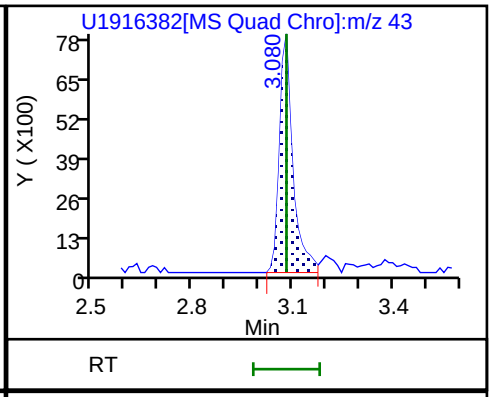
Report Date: 17-Aug-2020 14:45:00 Chrom Revision: 2.3 30-Jun-2020 12:05:54

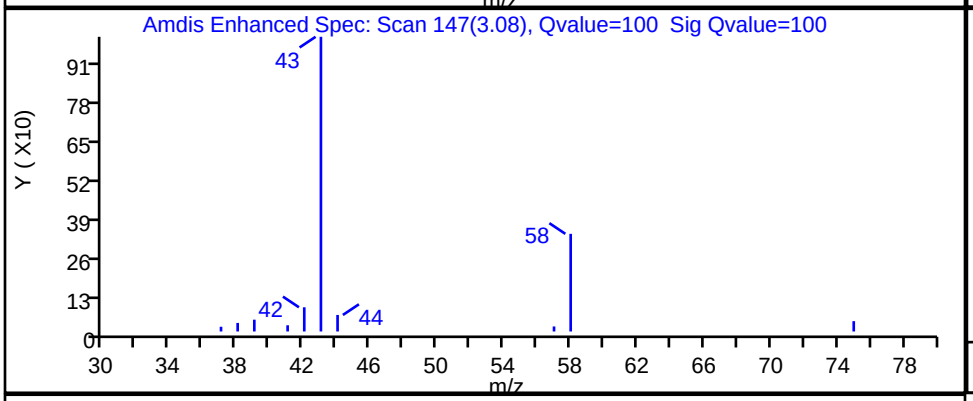
Eurofins TestAmerica, Canton

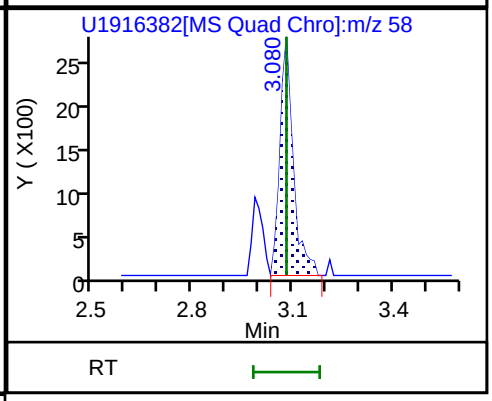
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916382.d		
Injection Date:	15-Aug-2020 01:57:04	Instrument ID:	A3UX19
Lims ID:	240-134931-B-27	Lab Sample ID:	240-134931-27
Client ID:	MSA-SW44C-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

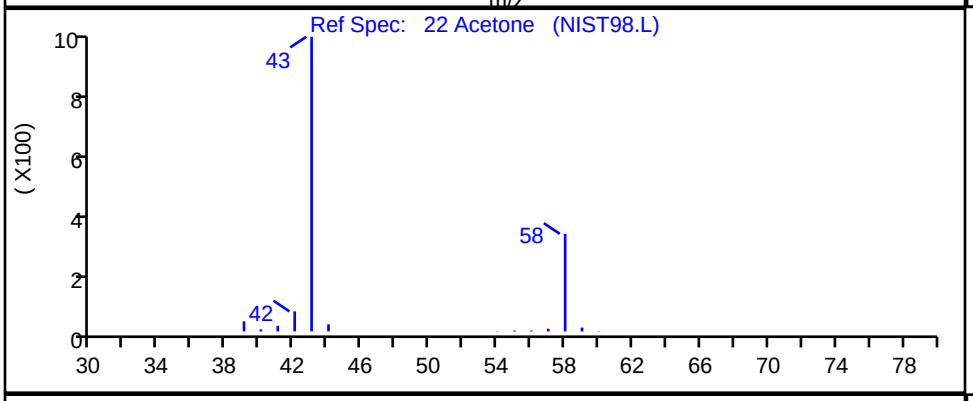
22 Acetone, CAS: 67-64-1

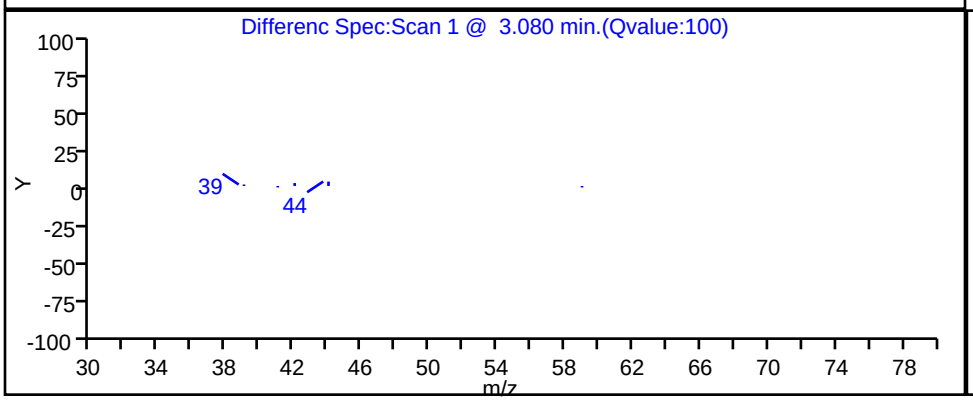


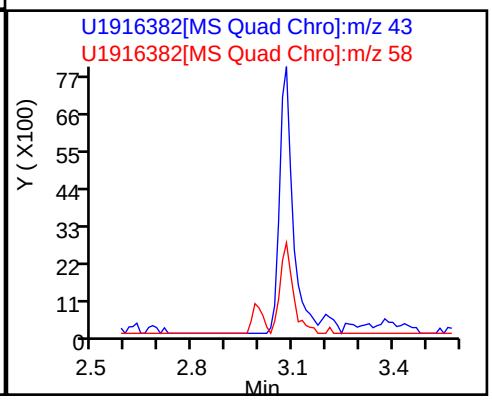












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW44D-081220 Lab Sample ID: 240-134931-28

Matrix: Water Lab File ID: U1916383.d

Analysis Method: 8260C Date Collected: 08/12/2020 08:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:19

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916383.d
Lims ID: 240-134931-B-28
Client ID: MSA-SW44D-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 02:19:28 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-026
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:45:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	909064	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	673033	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	338369	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	253357	20.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	97	293495	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	844473	20.9	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	281856	18.6	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.081	-0.001	100	15988	4.49	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.590	3.579	0.011	1	181	0.1470	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	97	1424	0.6634	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

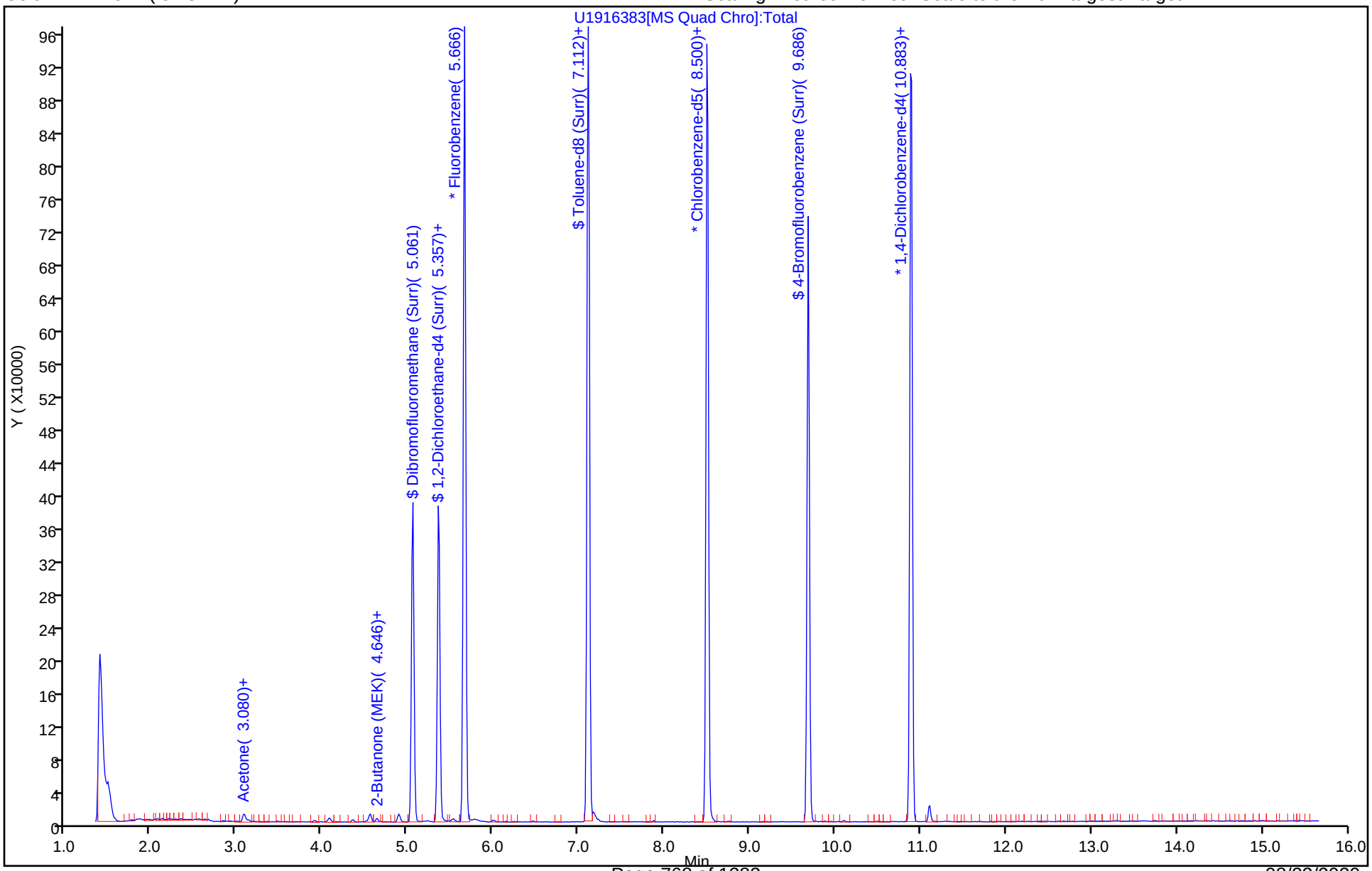
Report Date: 17-Aug-2020 14:45:21 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916383.d

Injection Date:	15-Aug-2020 02:19:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-28	Lab Sample ID:	240-134931-28	Worklist Smp#:	26
Client ID:	MSA-SW44D-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916383.d
Lims ID: 240-134931-B-28
Client ID: MSA-SW44D-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 02:19:28 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-026
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:44:03 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:45:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.7	103.53
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.42
$ 6 Toluene-d8 (Surr)	20.0	20.9	104.62
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.6	92.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	104		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: TB-081220 Lab Sample ID: 240-134931-29

Matrix: Water Lab File ID: U1916384.d

Analysis Method: 8260C Date Collected: 08/12/2020 00:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2020 02:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916384.d
Lims ID: 240-134931-A-29
Client ID: TB-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 02:41:54 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-027
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:45:53 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:45:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	906404	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	669847	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	335696	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	256946	21.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	292960	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	836289	20.8	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	279293	18.5	
9 Dichlorodifluoromethane	85		1.598				ND	
10 Chloromethane	50		1.812				ND	
12 Vinyl chloride	62		1.907				ND	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.081	3.081	-0.001	97	4852	1.37	
25 Carbon disulfide	76		3.247				ND	
29 Methylene Chloride	49		3.472				ND	
30 2-Methyl-2-propanol	59	3.602	3.579	0.023	6	707	0.5761	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.733				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.491				ND	
41 cis-1,2-Dichloroethene	96		4.634				ND	
40 2-Butanone (MEK)	72		4.634				ND	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.227				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.429				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130		5.998				ND	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.437				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.852				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.777				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.536				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.876				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.042				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

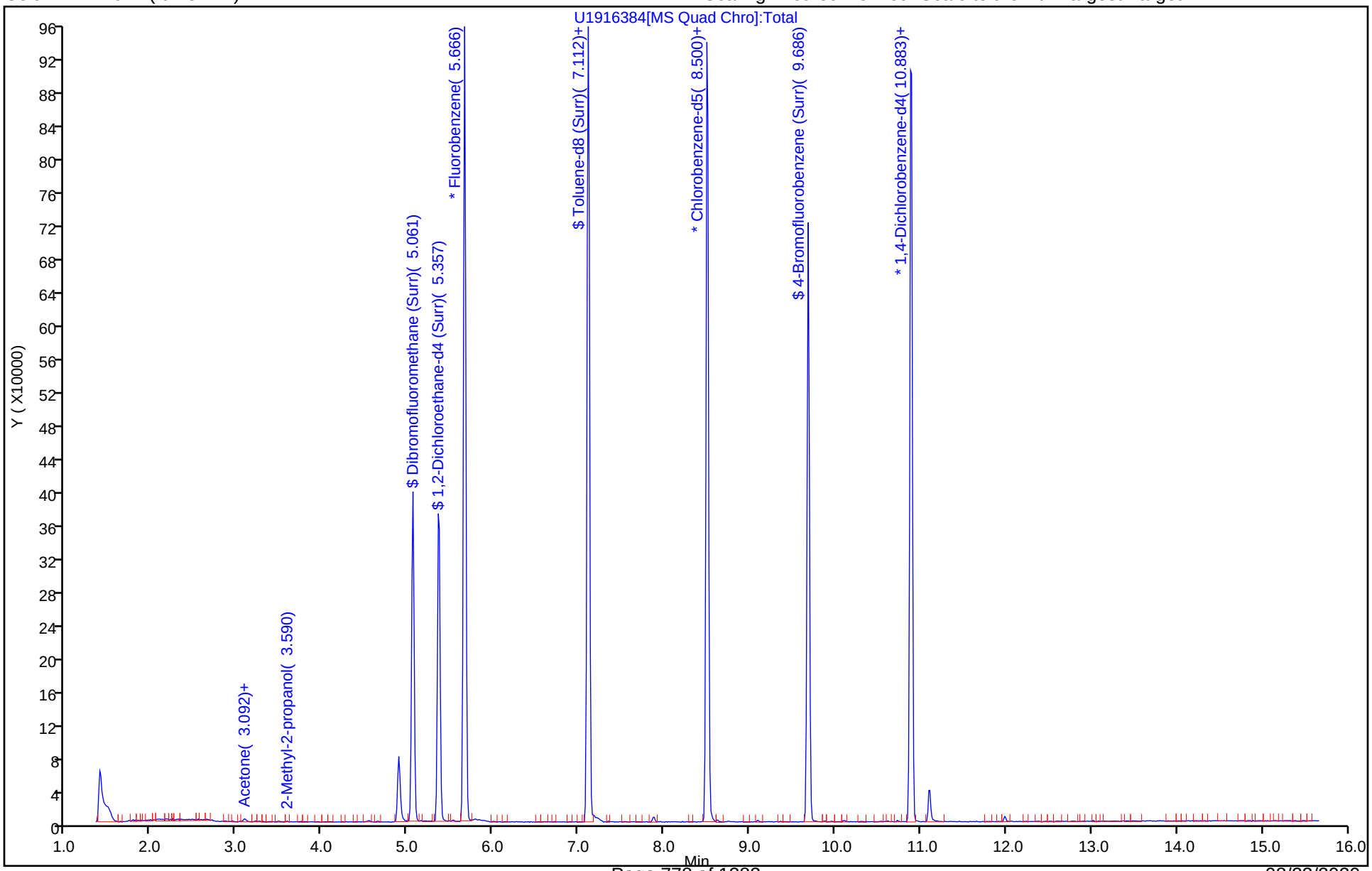
Report Date: 17-Aug-2020 14:45:53 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916384.d

Injection Date:	15-Aug-2020 02:41:54	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-29	Lab Sample ID:	240-134931-29	Worklist Smp#:	27
Client ID:	TB-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916384.d
Lims ID: 240-134931-A-29
Client ID: TB-081220
Sample Type: Client
Inject. Date: 15-Aug-2020 02:41:54 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-027
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 14:45:53 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 14:45:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.30
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.53
$ 6 Toluene-d8 (Surr)	20.0	20.8	104.10
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.39

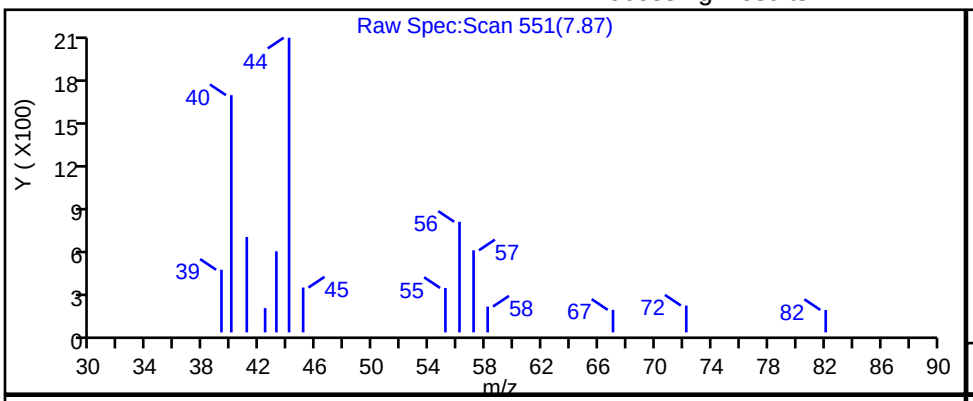
User Disabled Compound Report

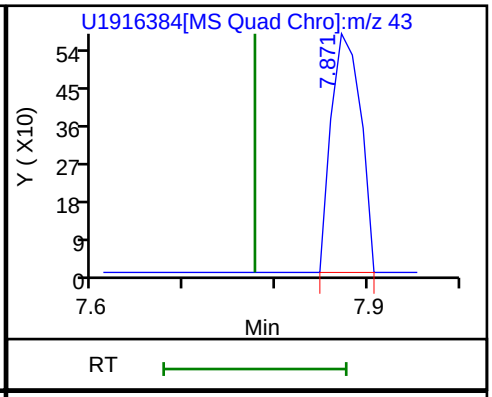
Eurofins TestAmerica, Canton

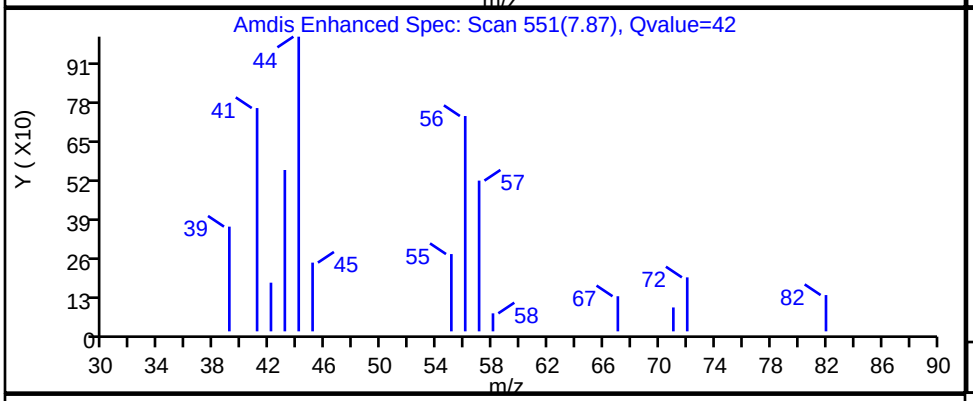
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916384.d				
Injection Date:	15-Aug-2020 02:41:54	Instrument ID:	A3UX19		
Lims ID:	240-134931-A-29	Lab Sample ID:	240-134931-29		
Client ID:	TB-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

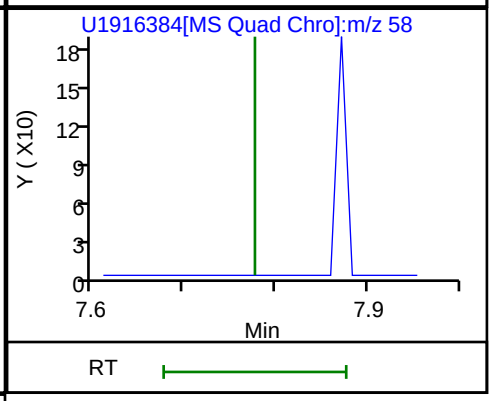
77 2-Hexanone, CAS: 591-78-6

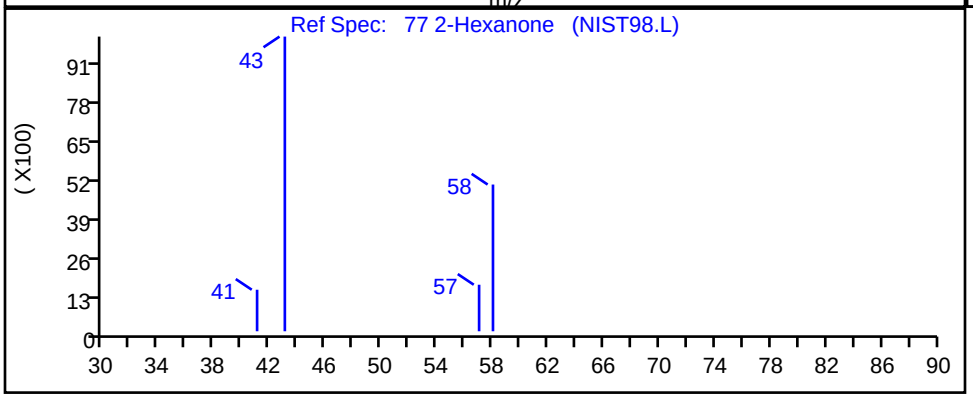
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1283	0.121652
7.78	58.00	0	

Reviewer: laveyt, 17-Aug-2020 14:45:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.72	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.56		0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		75-130
460-00-4	4-Bromofluorobenzene (Surr)	90		47-134
2037-26-5	Toluene-d8 (Surr)	101		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916416.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:06

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916416.d
Lims ID: 240-134931-B-30
Client ID: MSA-SW46A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 03:06:31 ALS Bottle#: 0 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-029
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:51:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	883786	20.0	
* 2 Chlorobenzene-d5	117	8.499	8.500	-0.001	85	652781	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	320354	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.060	5.061	-0.001	93	246537	20.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	278501	20.4	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	791582	20.2	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	265946	18.1	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	47	7376	0.5602	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	43126	12.4	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.590	-0.012	20	283	0.2365	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.645	4.634	0.011	78	2281	1.09	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	80	9171	0.7180	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.985	5.998	-0.013	93	3307	0.2368	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

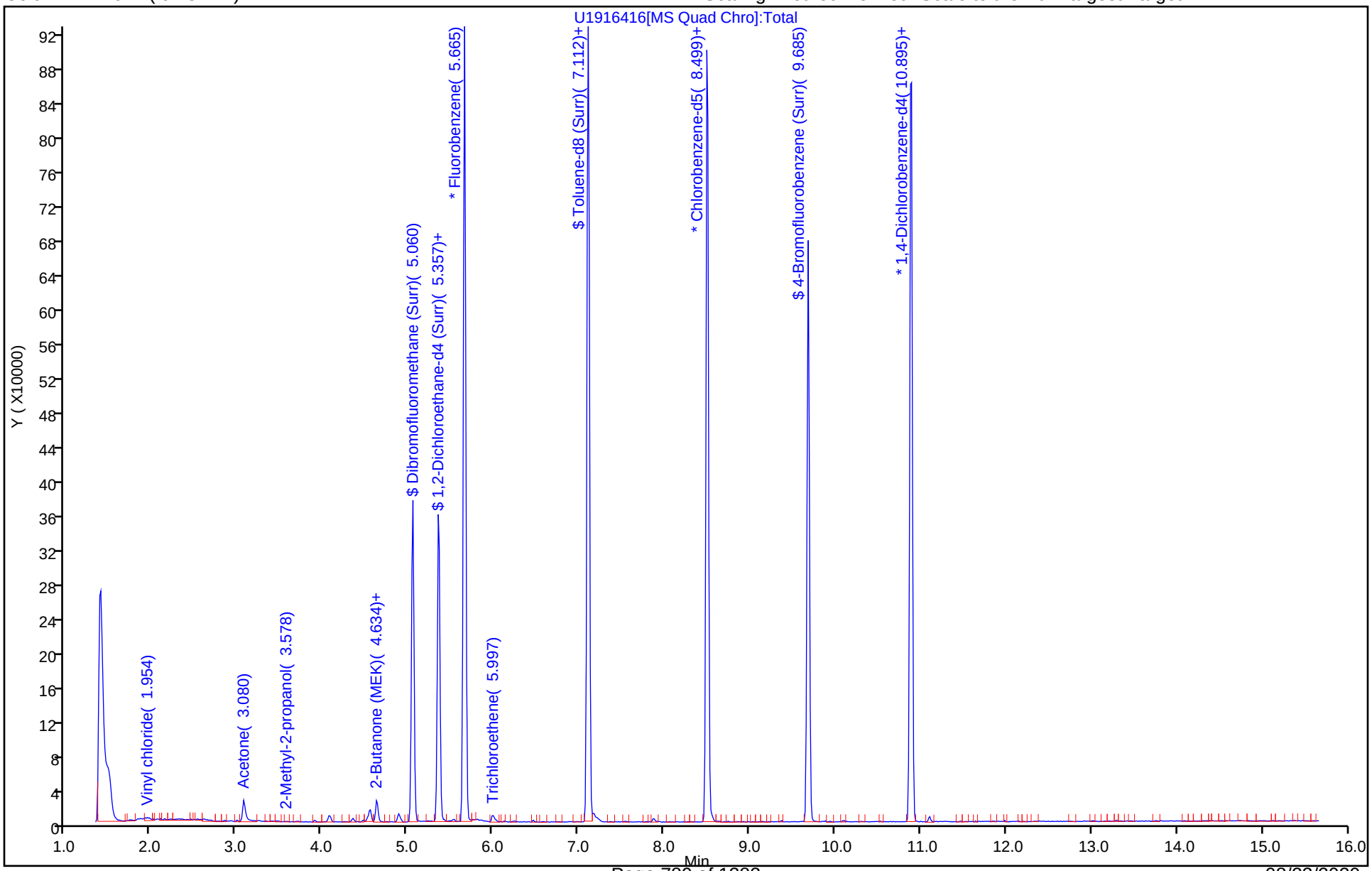
Report Date: 18-Aug-2020 14:51:38 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916416.d

Injection Date:	18-Aug-2020 03:06:31	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-30	Lab Sample ID:	240-134931-30	Worklist Smp#:	29
Client ID:	MSA-SW46A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916416.d
Lims ID: 240-134931-B-30
Client ID: MSA-SW46A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 03:06:31 ALS Bottle#: 0 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-029
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:51:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.7	103.62
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.4	101.92
$ 6 Toluene-d8 (Surr)	20.0	20.2	101.11
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.1	90.28

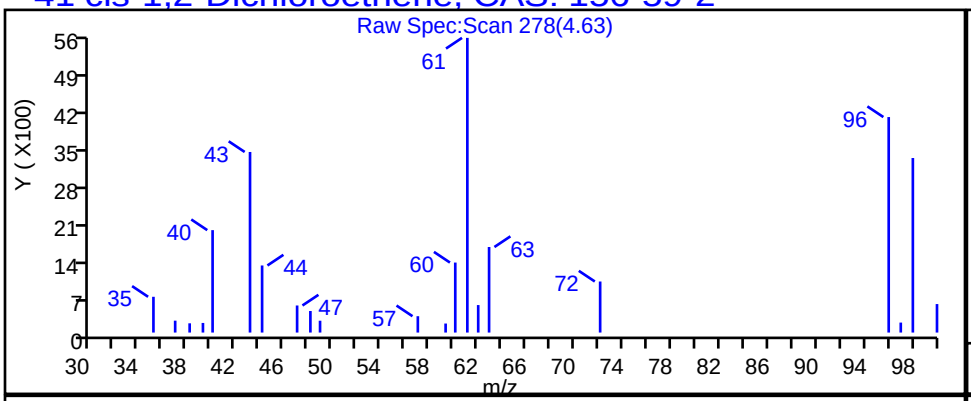
Report Date: 18-Aug-2020 14:51:38 Chrom Revision: 2.3 17-Aug-2020 20:42:08

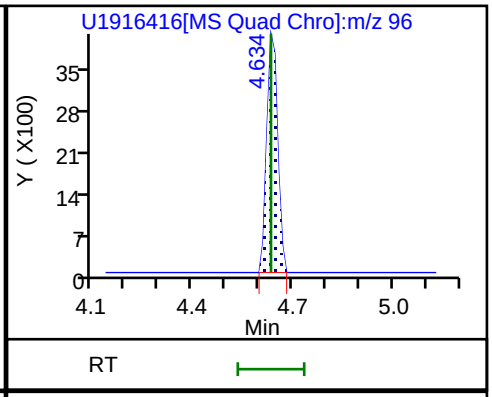
Eurofins TestAmerica, Canton

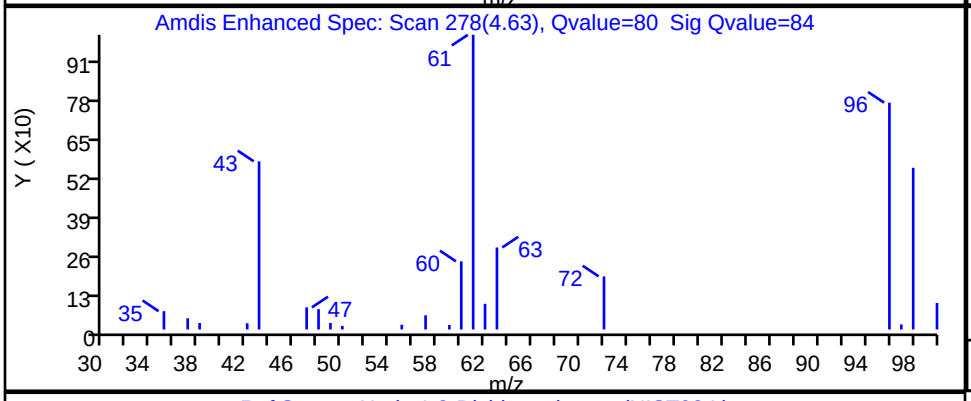
Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916416.d

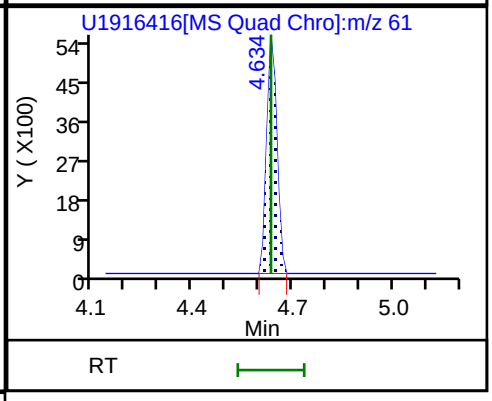
Injection Date:	18-Aug-2020 03:06:31	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-30	Lab Sample ID:	240-134931-30		
Client ID:	MSA-SW46A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

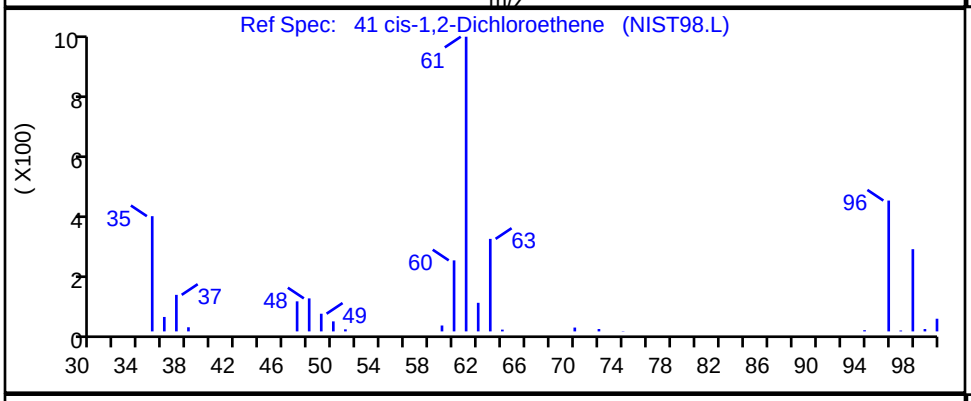
41 cis-1,2-Dichloroethene, CAS: 156-59-2

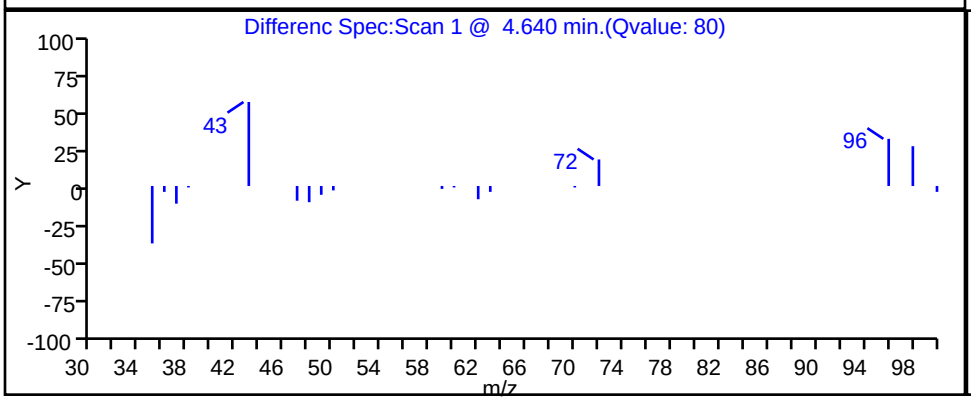


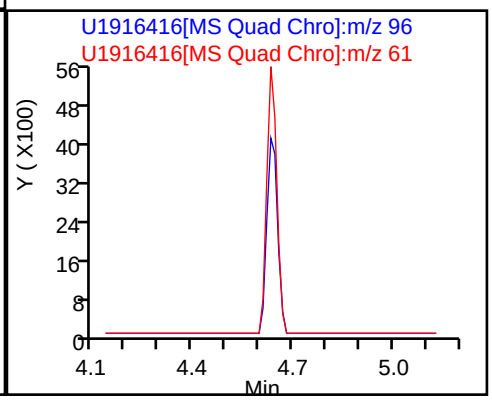








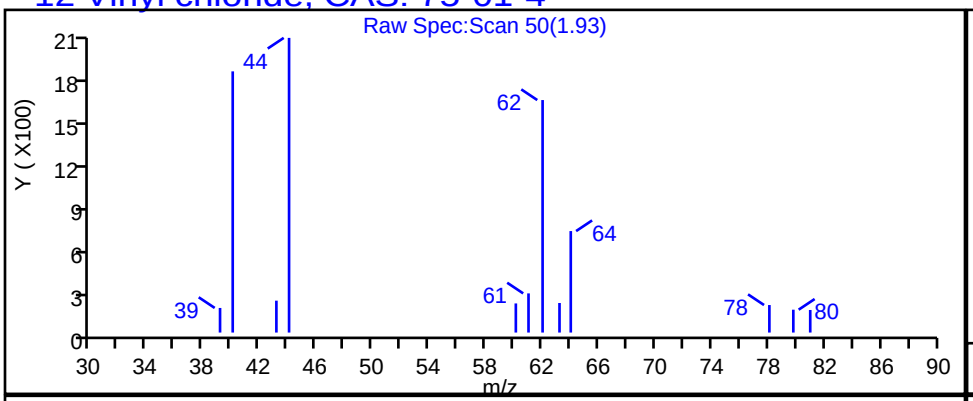


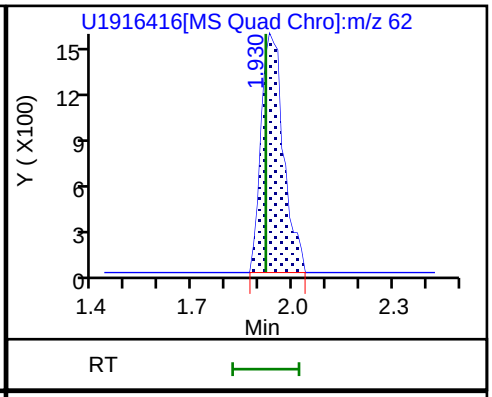


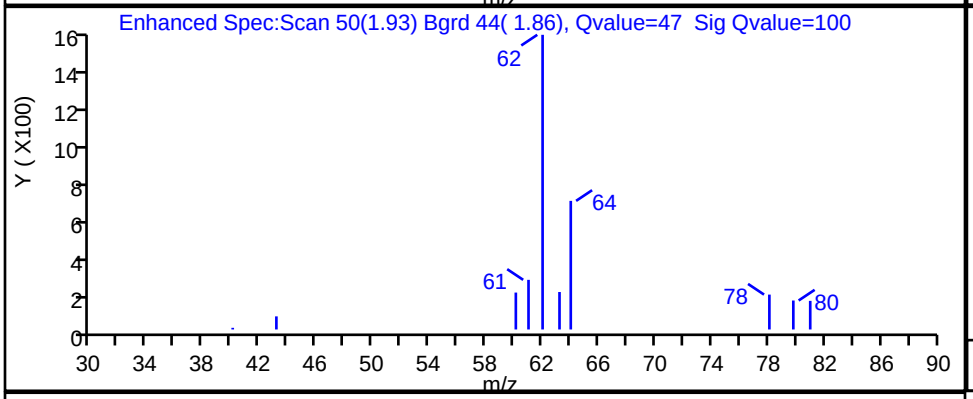
Eurofins TestAmerica, Canton

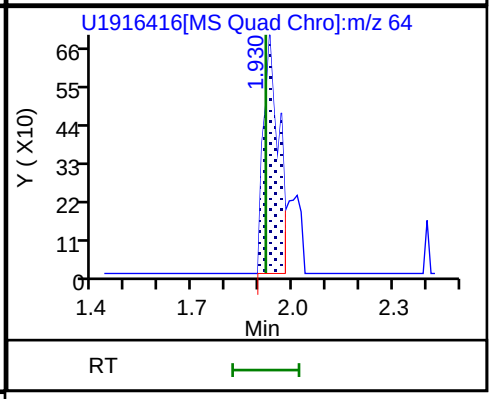
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916416.d		
Injection Date:	18-Aug-2020 03:06:31	Instrument ID:	A3UX19
Lims ID:	240-134931-B-30	Lab Sample ID:	240-134931-30
Client ID:	MSA-SW46A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 29
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

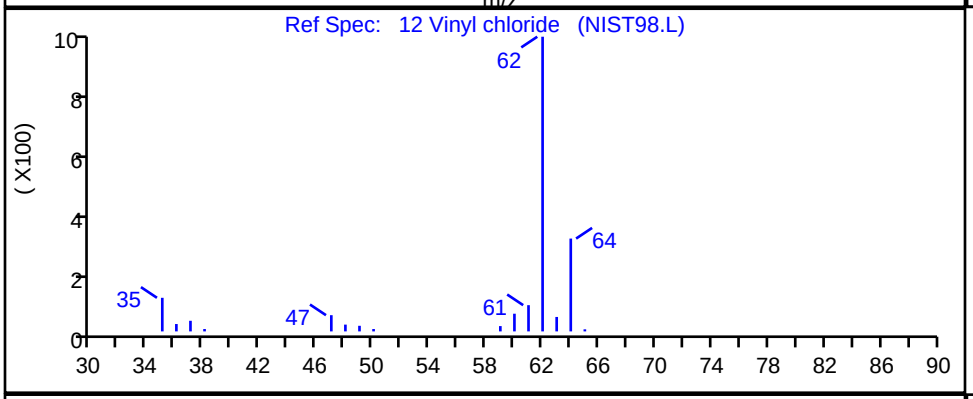
12 Vinyl chloride, CAS: 75-01-4

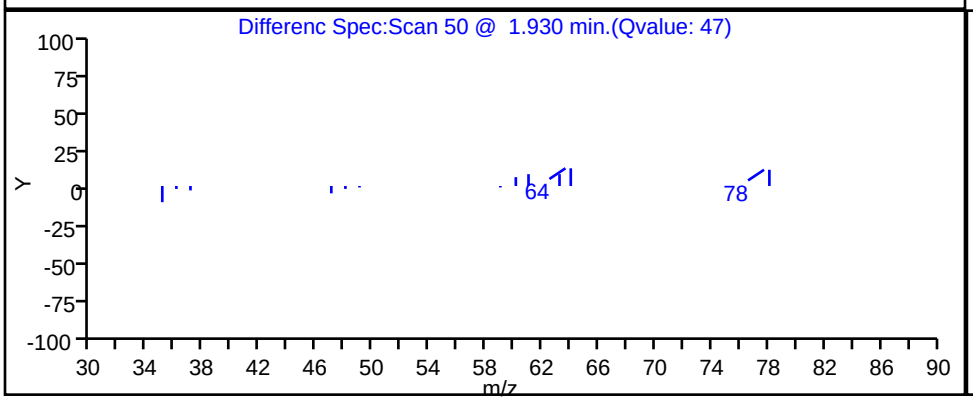


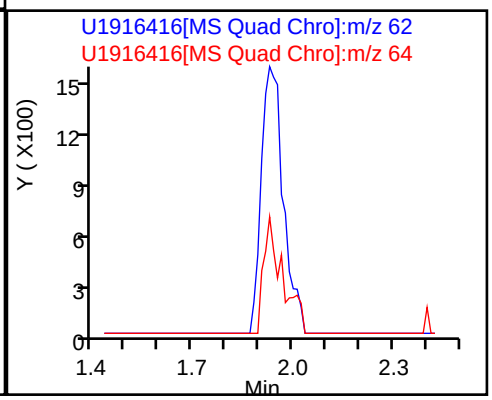












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916437.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	12		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	91		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW46A-081220 Lab Sample ID: 240-134931-30

Matrix: Water Lab File ID: U1916437.d

Analysis Method: 8260C Date Collected: 08/12/2020 10:02

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916437.d
Lims ID: 240-134931-C-30
Client ID: MSA-SW46A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 01:26:02 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-020
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:41:18 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:41:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	892915	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	669729	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	338552	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	252322	21.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	290669	21.1	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	847736	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	92	274050	18.1	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	95	6871	0.5165	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	40775	11.6	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59		3.578				ND	U
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	78	9296	0.7203	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	86	2750	1.30	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	94	3391	0.2404	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

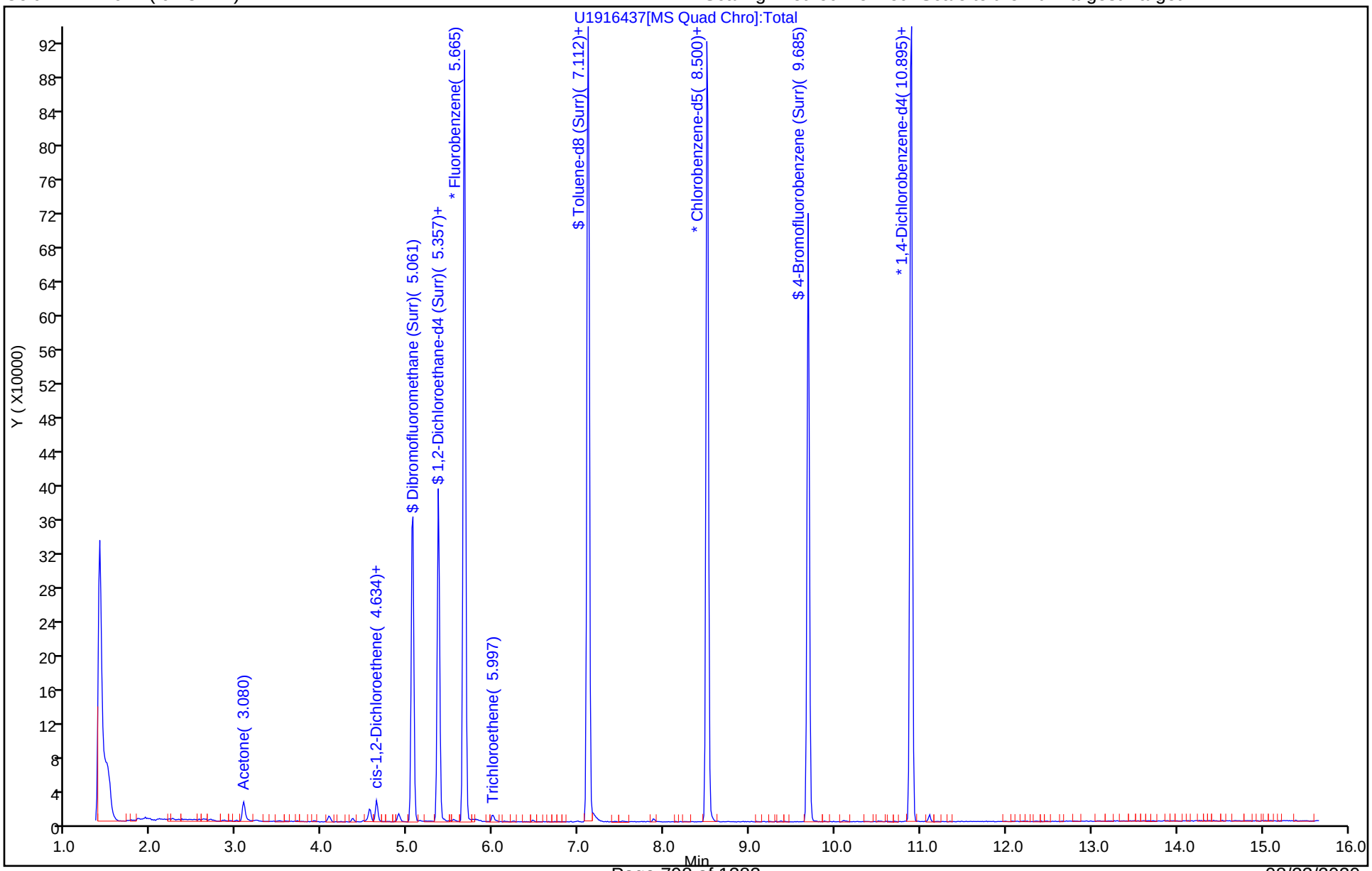
Report Date: 19-Aug-2020 13:41:18 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916437.d

Injection Date:	19-Aug-2020 01:26:02	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-30	Lab Sample ID:	240-134931-30	Worklist Smp#:	20
Client ID:	MSA-SW46A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916437.d
Lims ID: 240-134931-C-30
Client ID: MSA-SW46A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 01:26:02 ALS Bottle#: 0 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-020
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:41:18 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

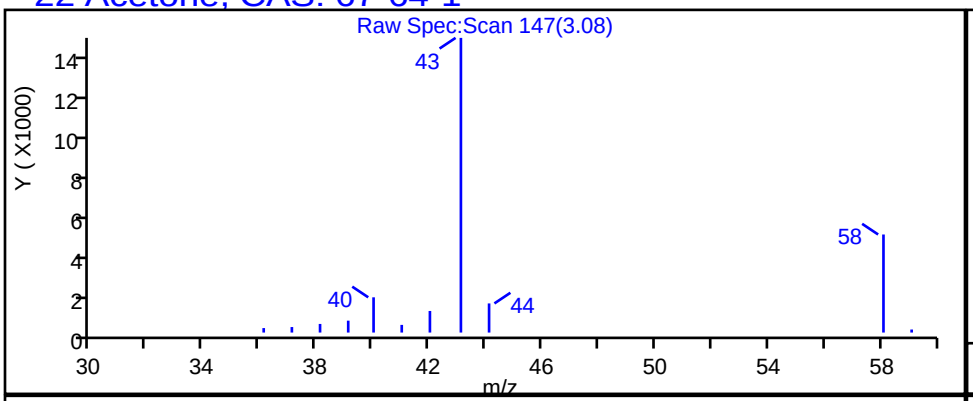
First Level Reviewer: laveyt Date: 19-Aug-2020 13:41:18

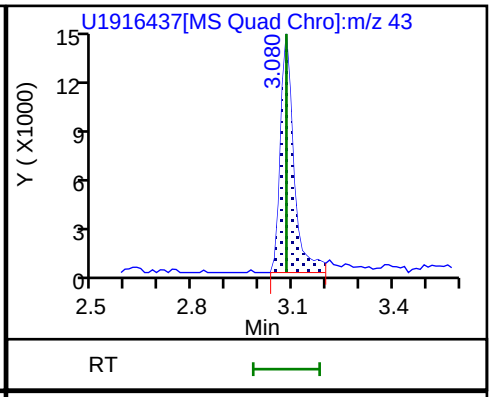
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	104.97
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.1	105.28
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.55
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.1	90.67

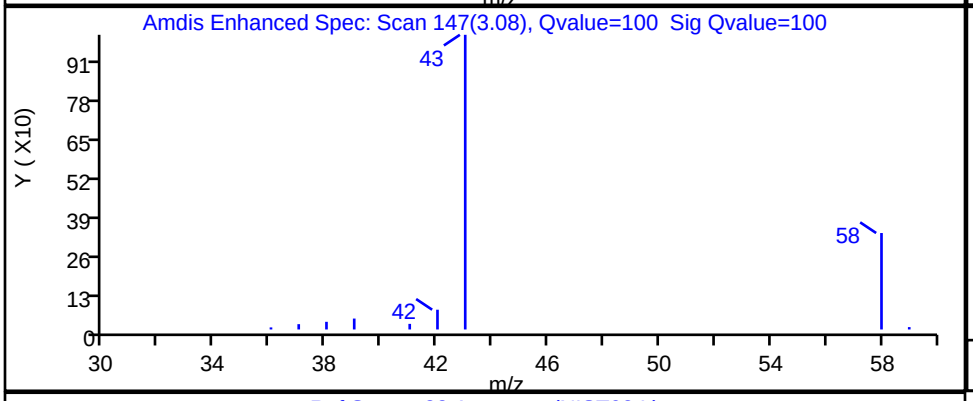
Eurofins TestAmerica, Canton

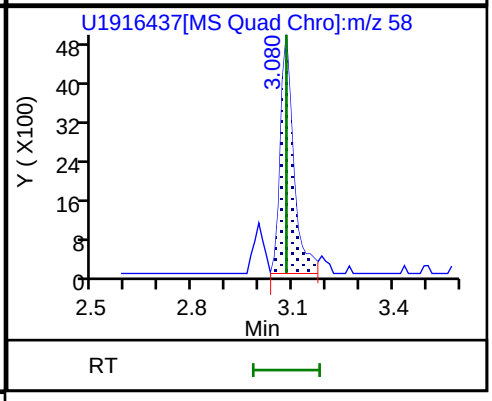
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916437.d		
Injection Date:	19-Aug-2020 01:26:02	Instrument ID:	A3UX19
Lims ID:	240-134931-C-30	Lab Sample ID:	240-134931-30
Client ID:	MSA-SW46A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

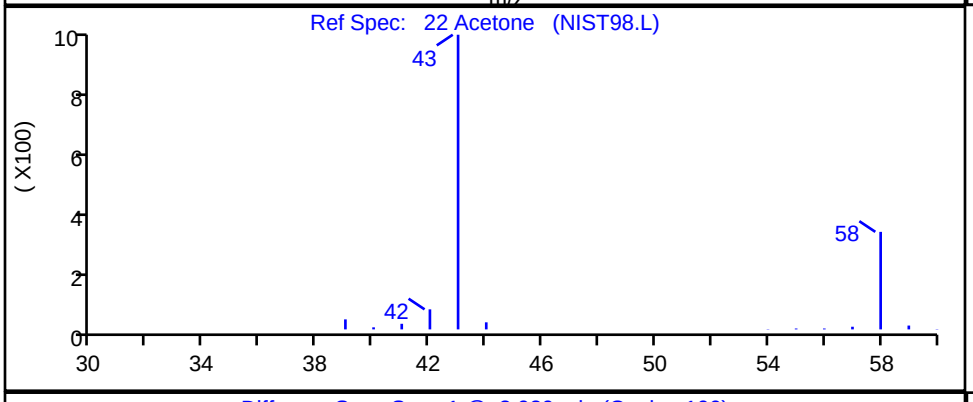
22 Acetone, CAS: 67-64-1

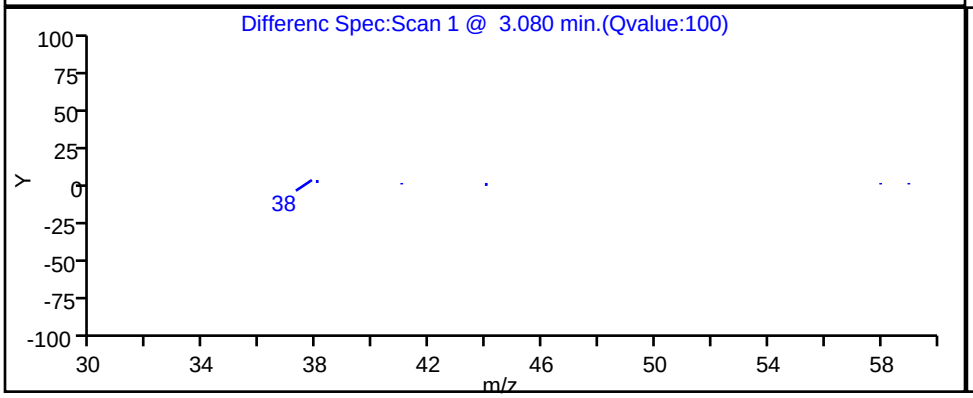


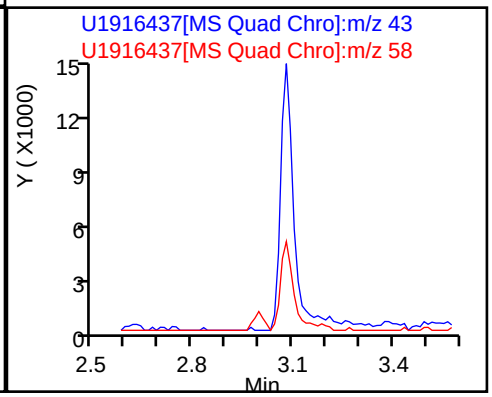












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.42	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		75-130
460-00-4	4-Bromofluorobenzene (Surr)	88		47-134
2037-26-5	Toluene-d8 (Surr)	100		69-122
1868-53-7	Dibromofluoromethane (Surr)	103		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916417.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:28

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916417.d
Lims ID: 240-134931-B-31
Client ID: MSA-SW47A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 03:28:58 ALS Bottle#: 0 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-030
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:52:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	880192	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	661616	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	329024	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	94	243384	20.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	275211	20.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	791602	20.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	263114	17.6	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.906	1.918	-0.012	25	3837	0.2926	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	39088	11.3	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.590	0.000	6	528	0.4430	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	99	1867	0.8983	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	78	5309	0.4173	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	93	2771	0.1992	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

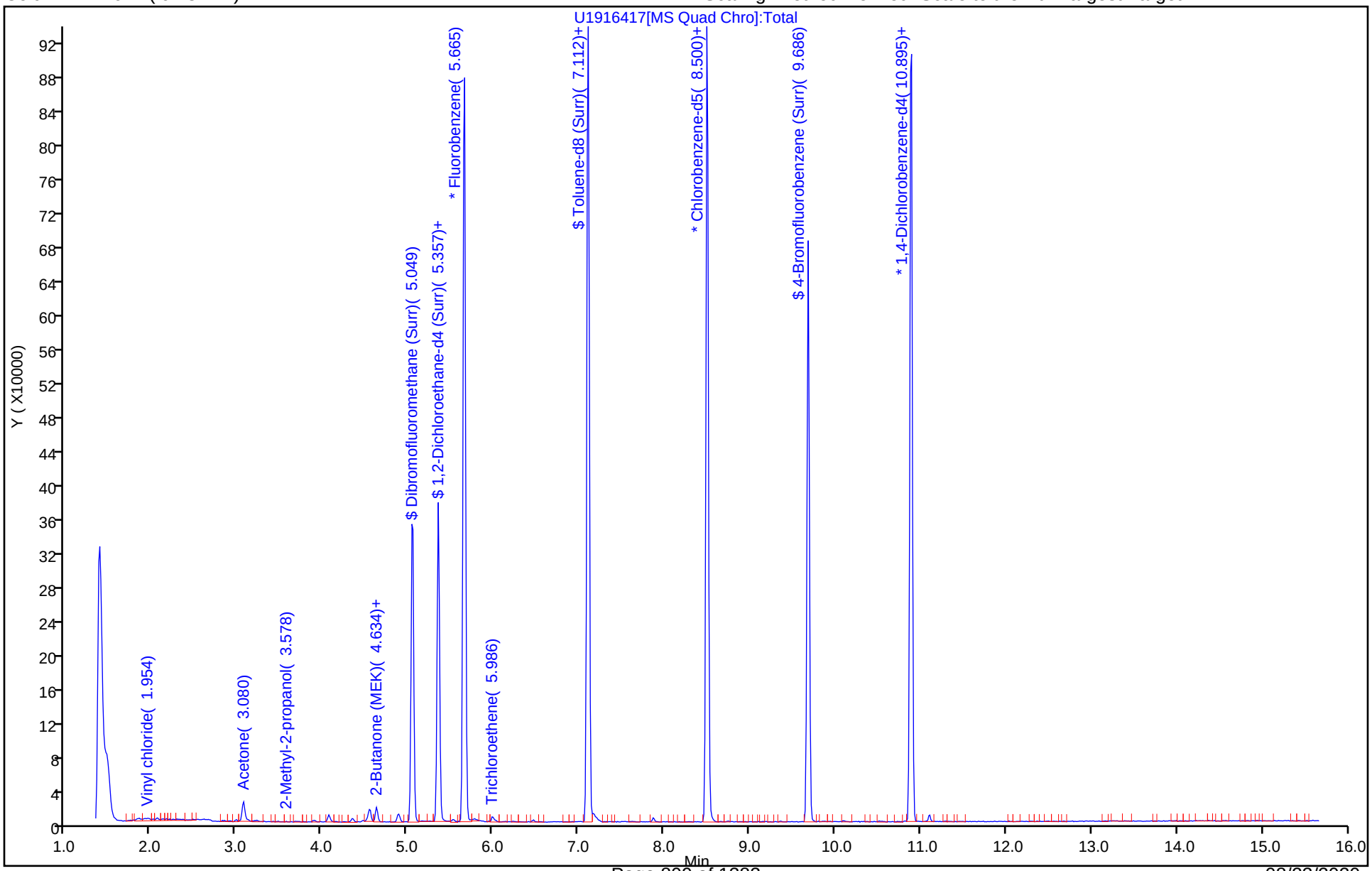
Report Date: 18-Aug-2020 14:52:10 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916417.d

Injection Date:	18-Aug-2020 03:28:58	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-31	Lab Sample ID:	240-134931-31	Worklist Smp#:	30
Client ID:	MSA-SW47A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916417.d
Lims ID: 240-134931-B-31
Client ID: MSA-SW47A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 03:28:58 ALS Bottle#: 0 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-030
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:50:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

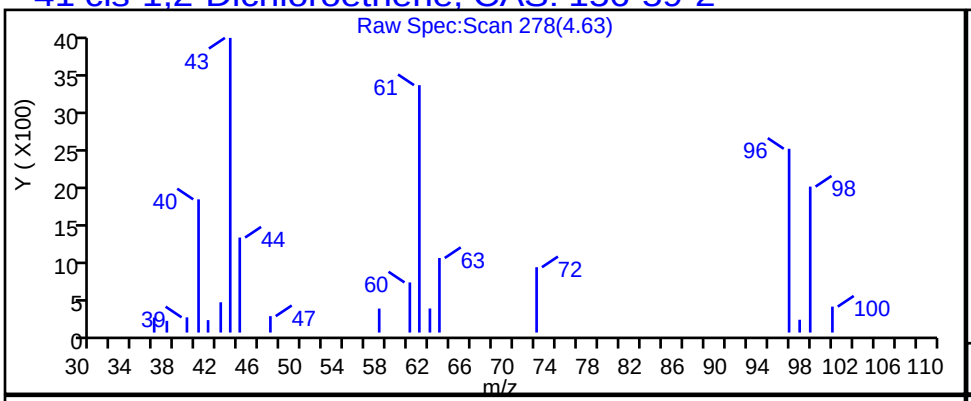
First Level Reviewer: laveyt Date: 18-Aug-2020 14:52:10

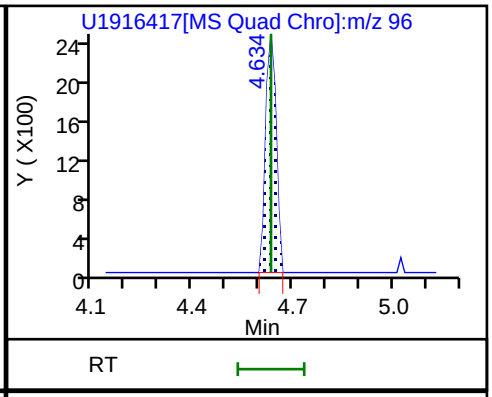
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.5	102.72
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.2	101.12
$ 6 Toluene-d8 (Surr)	20.0	20.0	99.77
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	88.12

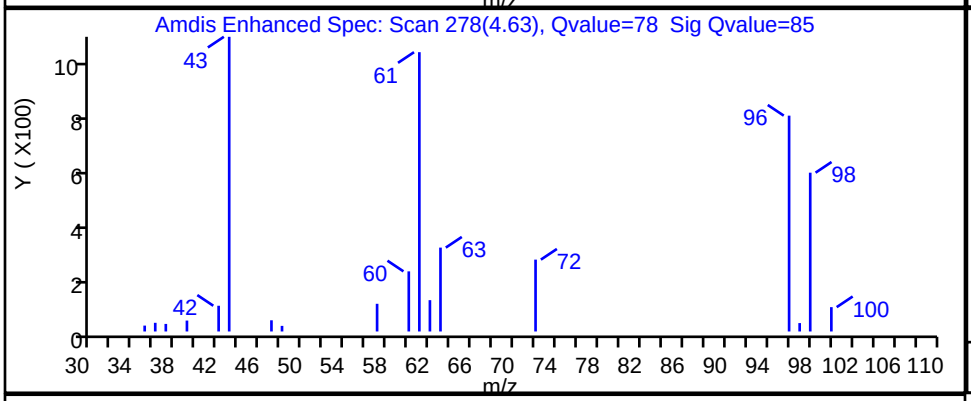
Eurofins TestAmerica, Canton

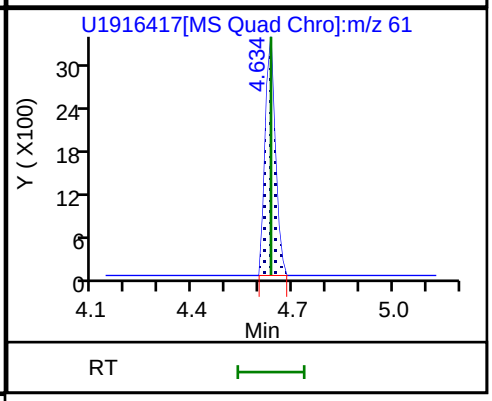
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916417.d		
Injection Date:	18-Aug-2020 03:28:58	Instrument ID:	A3UX19
Lims ID:	240-134931-B-31	Lab Sample ID:	240-134931-31
Client ID:	MSA-SW47A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

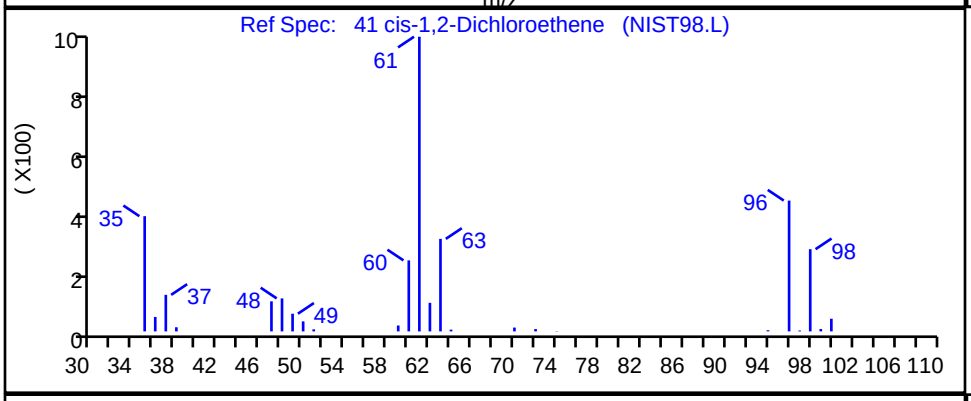
41 cis-1,2-Dichloroethene, CAS: 156-59-2

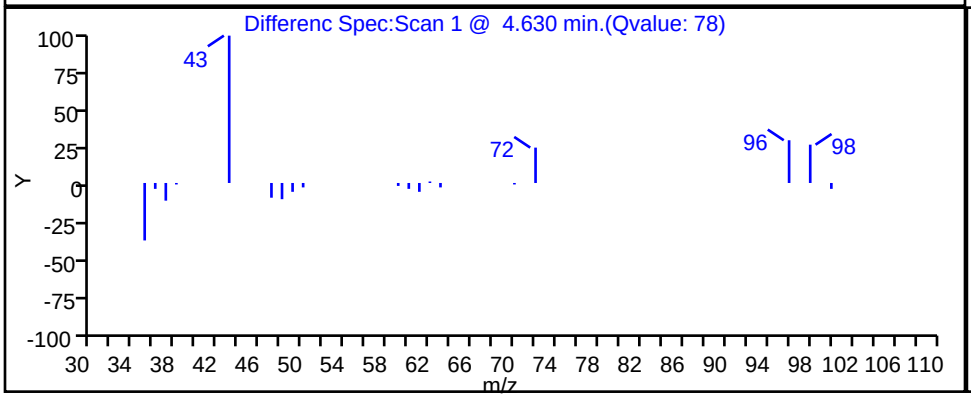


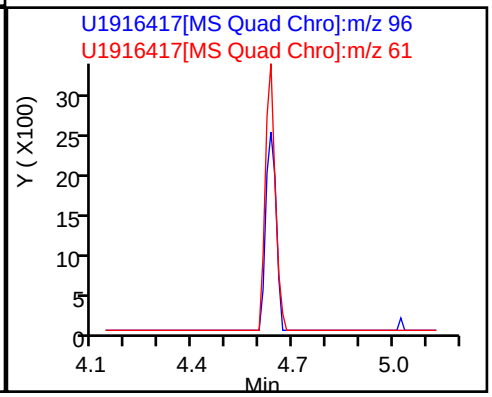












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916438.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	10		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	92		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW47A-081220 Lab Sample ID: 240-134931-31

Matrix: Water Lab File ID: U1916438.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:46

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 01:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916438.d
Lims ID: 240-134931-A-31
Client ID: MSA-SW47A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 01:48:16 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-021
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:41:55 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:41:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	859457	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	636547	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	317151	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	248249	21.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	97	281310	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	804636	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	264300	18.4	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	94	3901	0.3047	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.092	3.080	0.012	100	33661	10.0	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.578	0.012	6	383	0.3291	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.646	4.634	0.012	76	5809	0.4676	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	100	2331	1.15	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	91	2623	0.1932	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

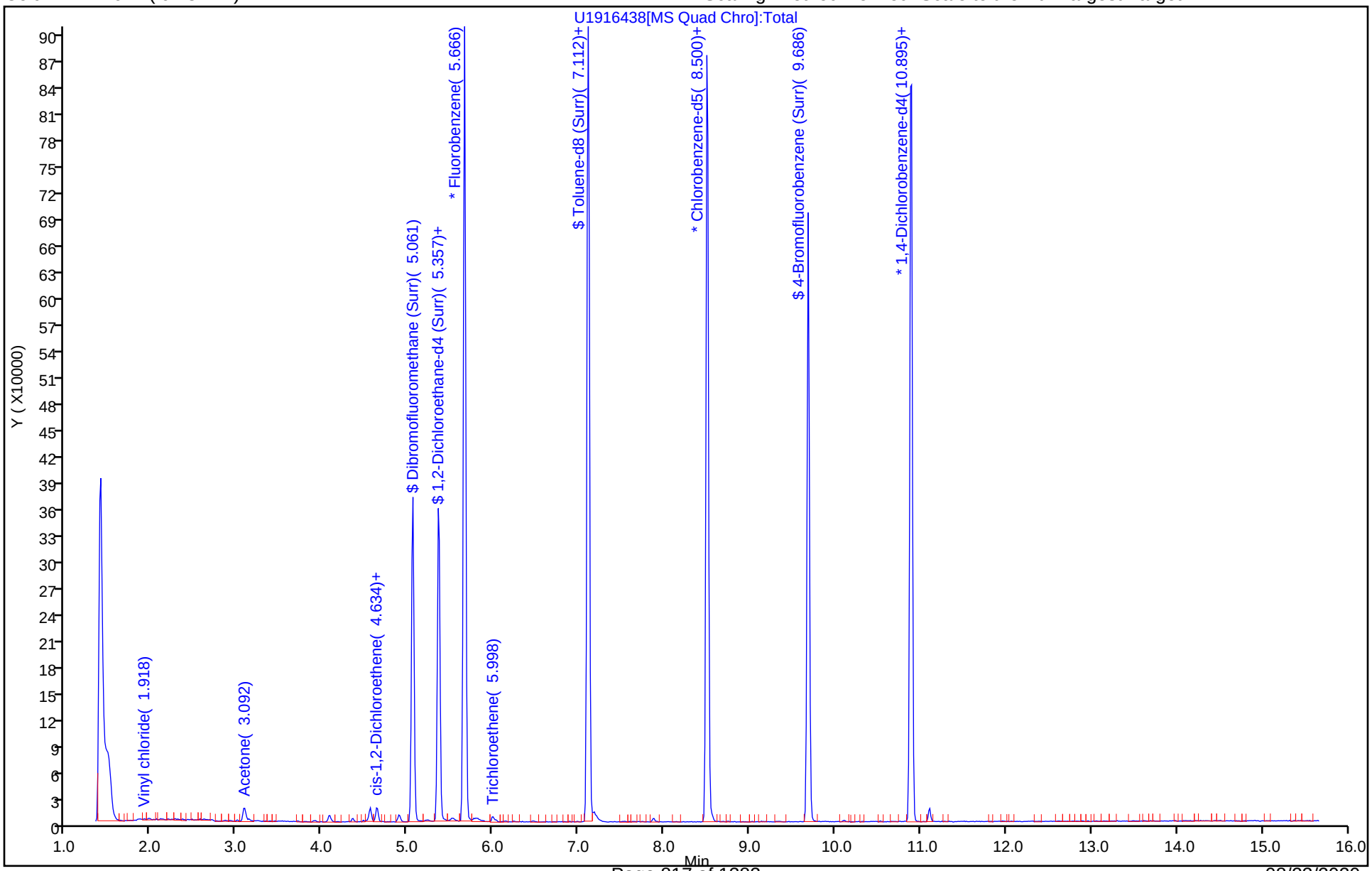
Report Date: 19-Aug-2020 13:41:55 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916438.d

Injection Date:	19-Aug-2020 01:48:16	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-31	Lab Sample ID:	240-134931-31	Worklist Smp#:	21
Client ID:	MSA-SW47A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916438.d
Lims ID: 240-134931-A-31
Client ID: MSA-SW47A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 01:48:16 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-021
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:41:55 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:41:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.5	107.30
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	105.86
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.40
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.4	92.01

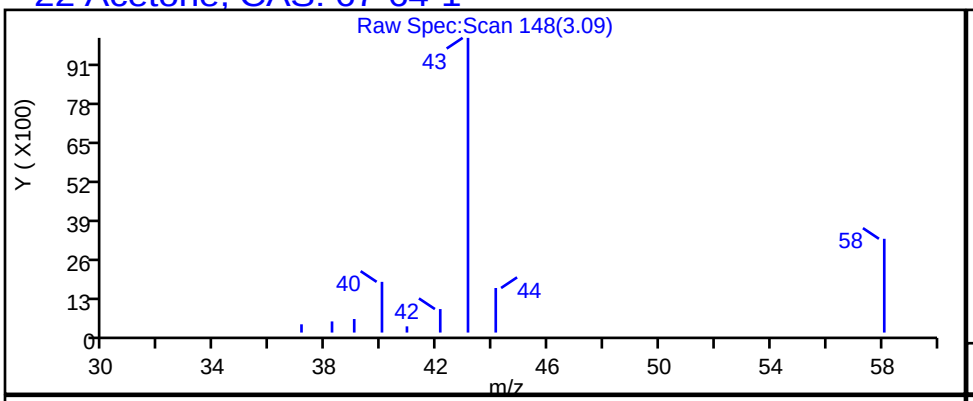
Report Date: 19-Aug-2020 13:41:55 Chrom Revision: 2.3 17-Aug-2020 20:42:08

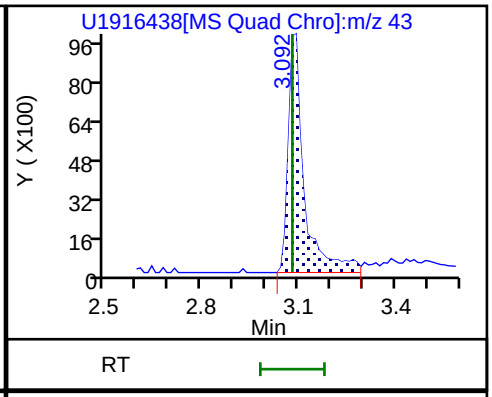
Eurofins TestAmerica, Canton

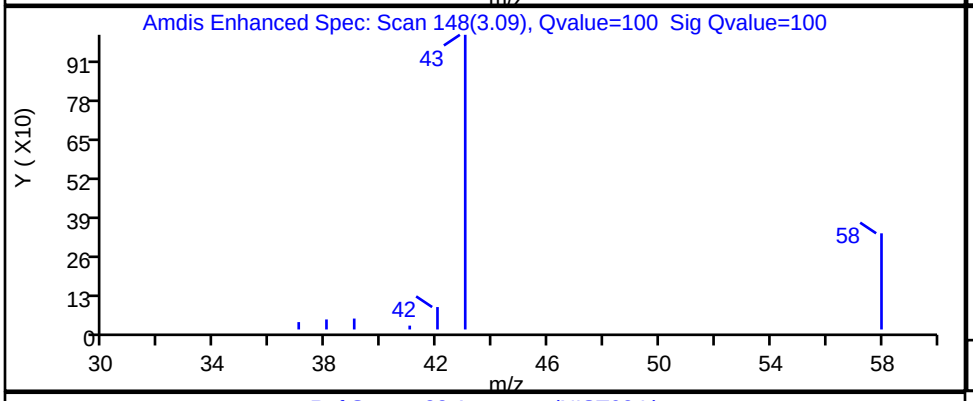
Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916438.d

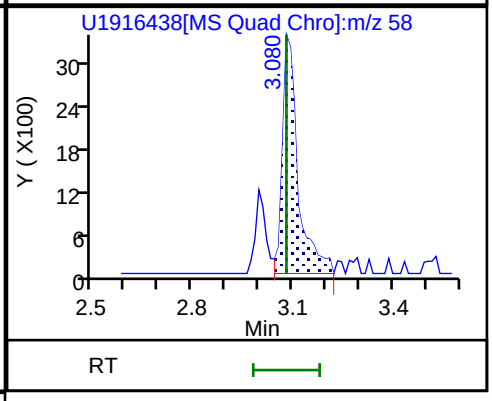
Injection Date:	19-Aug-2020 01:48:16	Instrument ID:	A3UX19
Lims ID:	240-134931-A-31	Lab Sample ID:	240-134931-31
Client ID:	MSA-SW47A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

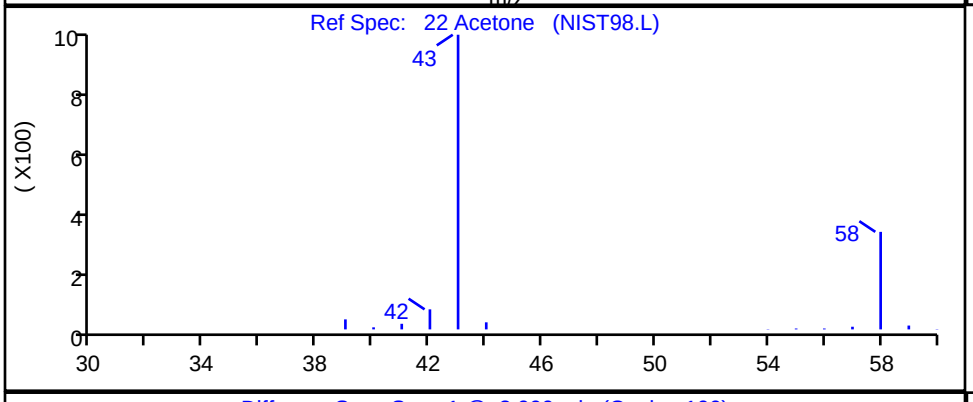
22 Acetone, CAS: 67-64-1

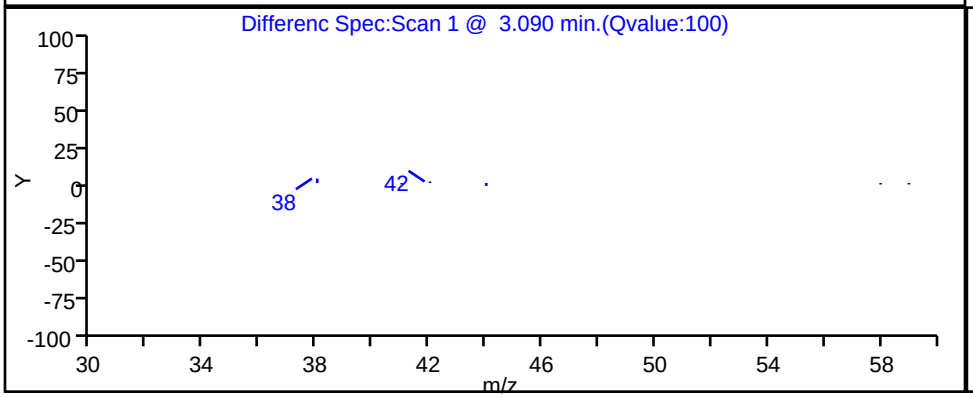


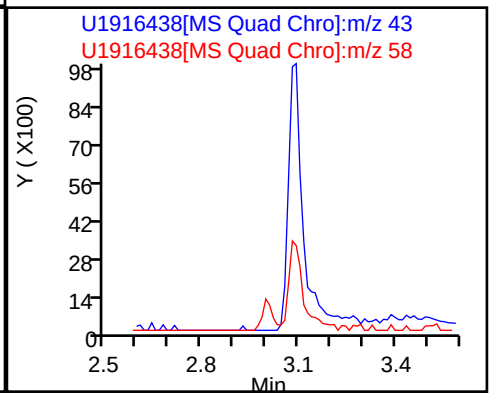












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916418.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 03:51

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916418.d
Lims ID: 240-134931-A-32
Client ID: MSA-SW48A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 03:51:35 ALS Bottle#: 0 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-031
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:52:52 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:52:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	892592	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	663509	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	335965	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	93	254565	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	288689	20.9	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	837959	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	277156	18.5	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	95	2061	0.1550	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	38713	11.1	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.590	-0.012	4	603	0.4989	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	2526	1.20	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	71	3981	0.3086	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	96	2798	0.1984	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

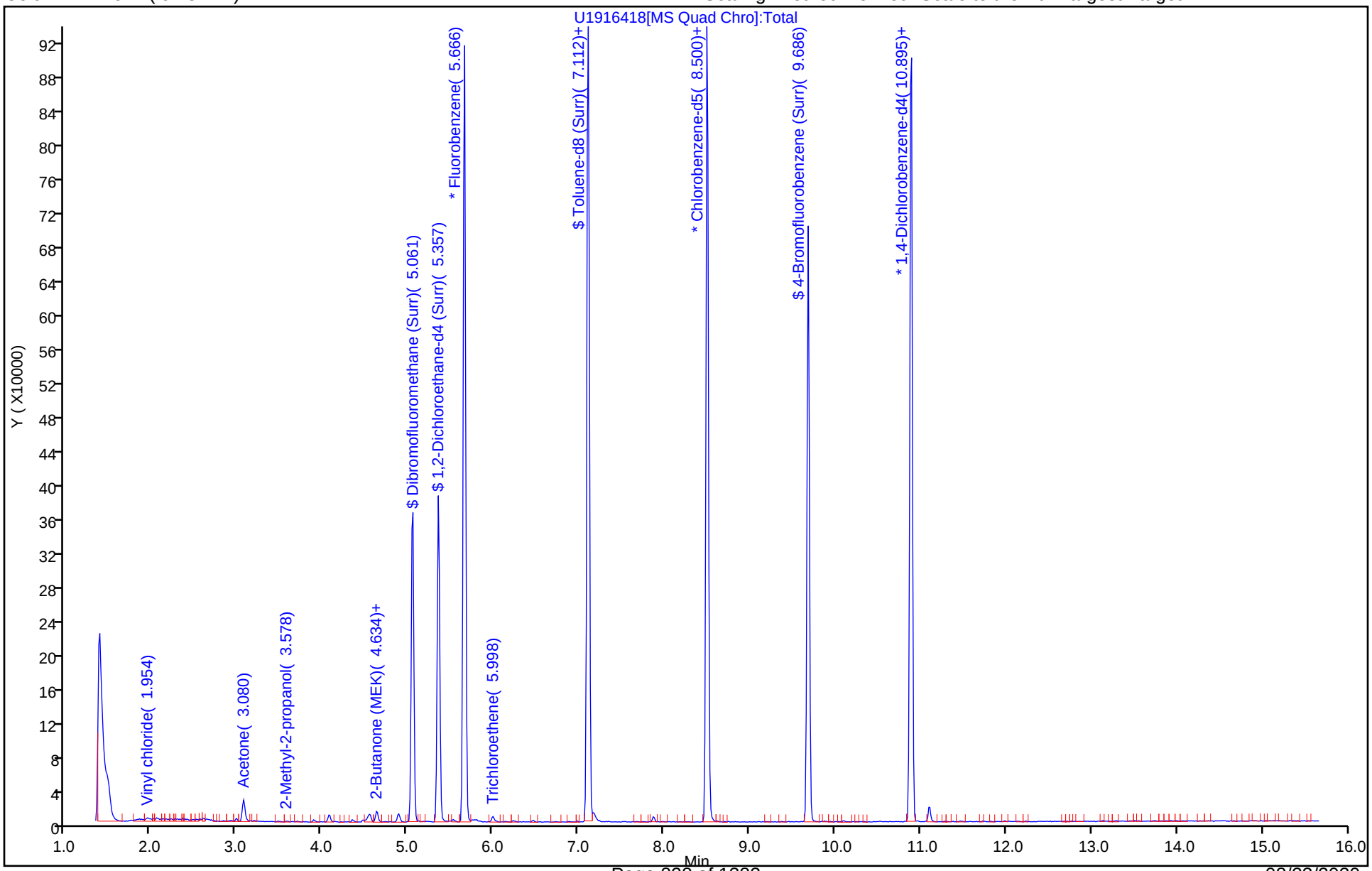
Report Date: 18-Aug-2020 14:52:53 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916418.d

Injection Date:	18-Aug-2020 03:51:35	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-32	Lab Sample ID:	240-134931-32	Worklist Smp#:	31
Client ID:	MSA-SW48A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916418.d
Lims ID: 240-134931-A-32
Client ID: MSA-SW48A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 03:51:35 ALS Bottle#: 0 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-031
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:52:52 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:52:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.2	105.94
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.9	104.60
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.31
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.56

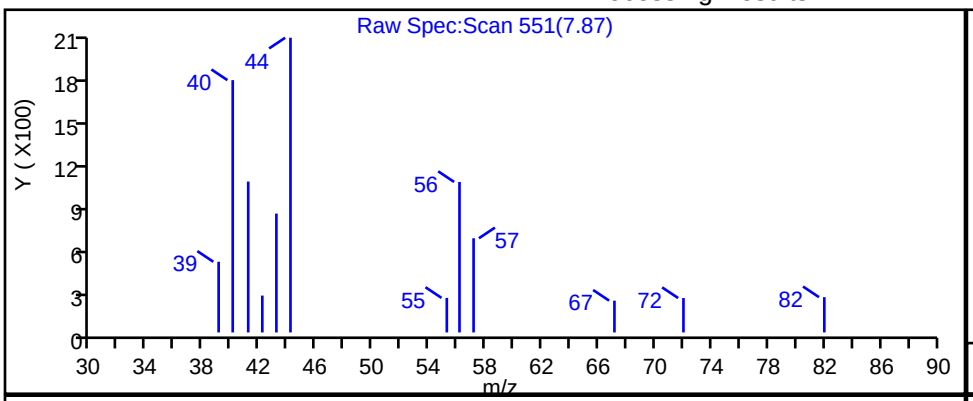
User Disabled Compound Report

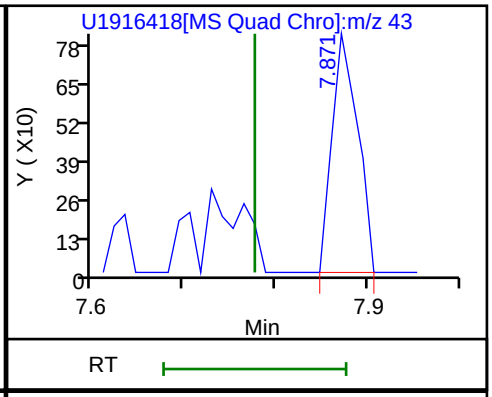
Eurofins TestAmerica, Canton

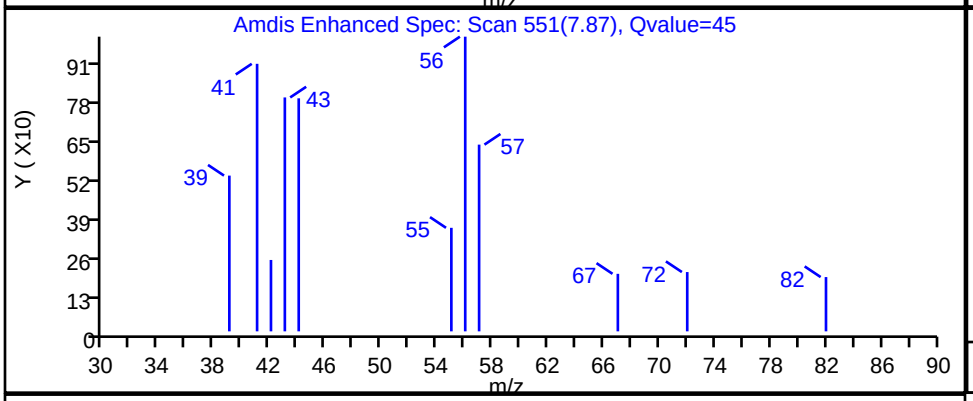
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916418.d				
Injection Date:	18-Aug-2020 03:51:35	Instrument ID:	A3UX19		
Lims ID:	240-134931-A-32	Lab Sample ID:	240-134931-32		
Client ID:	MSA-SW48A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

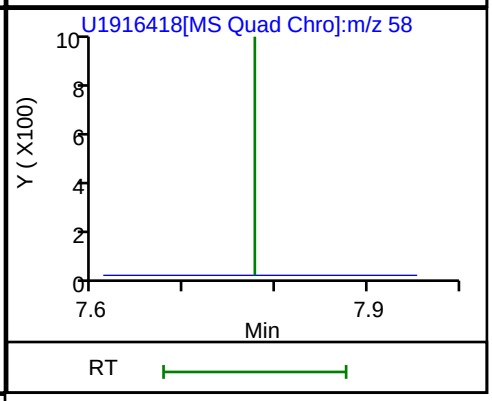
77 2-Hexanone, CAS: 591-78-6

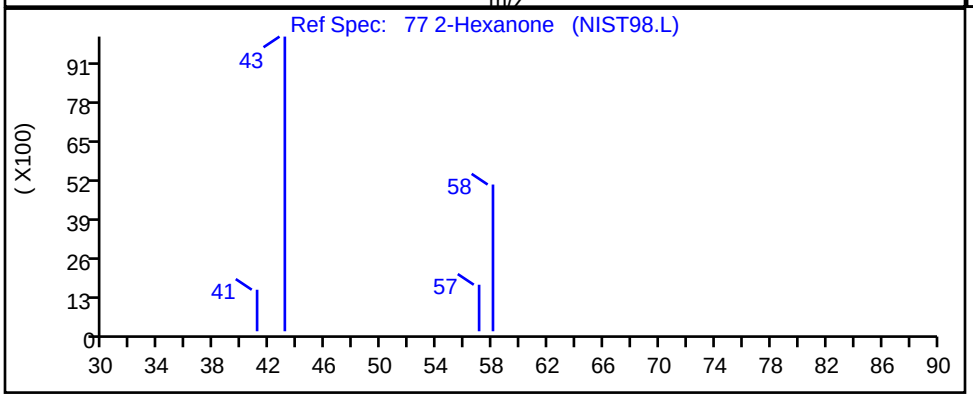
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1594	0.152585
7.78	58.00	0	

Reviewer: laveyt, 18-Aug-2020 14:52:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916439.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	11		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-130
460-00-4	4-Bromofluorobenzene (Surr)	89		47-134
2037-26-5	Toluene-d8 (Surr)	102		69-122
1868-53-7	Dibromofluoromethane (Surr)	106		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW48A-081220 Lab Sample ID: 240-134931-32

Matrix: Water Lab File ID: U1916439.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:29

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916439.d
Lims ID: 240-134931-C-32
Client ID: MSA-SW48A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 02:10:28 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-022
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:42:32 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:42:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	879171	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	664869	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	324656	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	249912	21.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	281593	20.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	810723	20.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	265888	17.7	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.930	1.918	0.012	91	2148	0.1640	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	39167	11.4	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	6	137	0.1151	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	79	3407	0.2681	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	2307	1.11	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.998	5.998	0.000	86	2613	0.1881	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

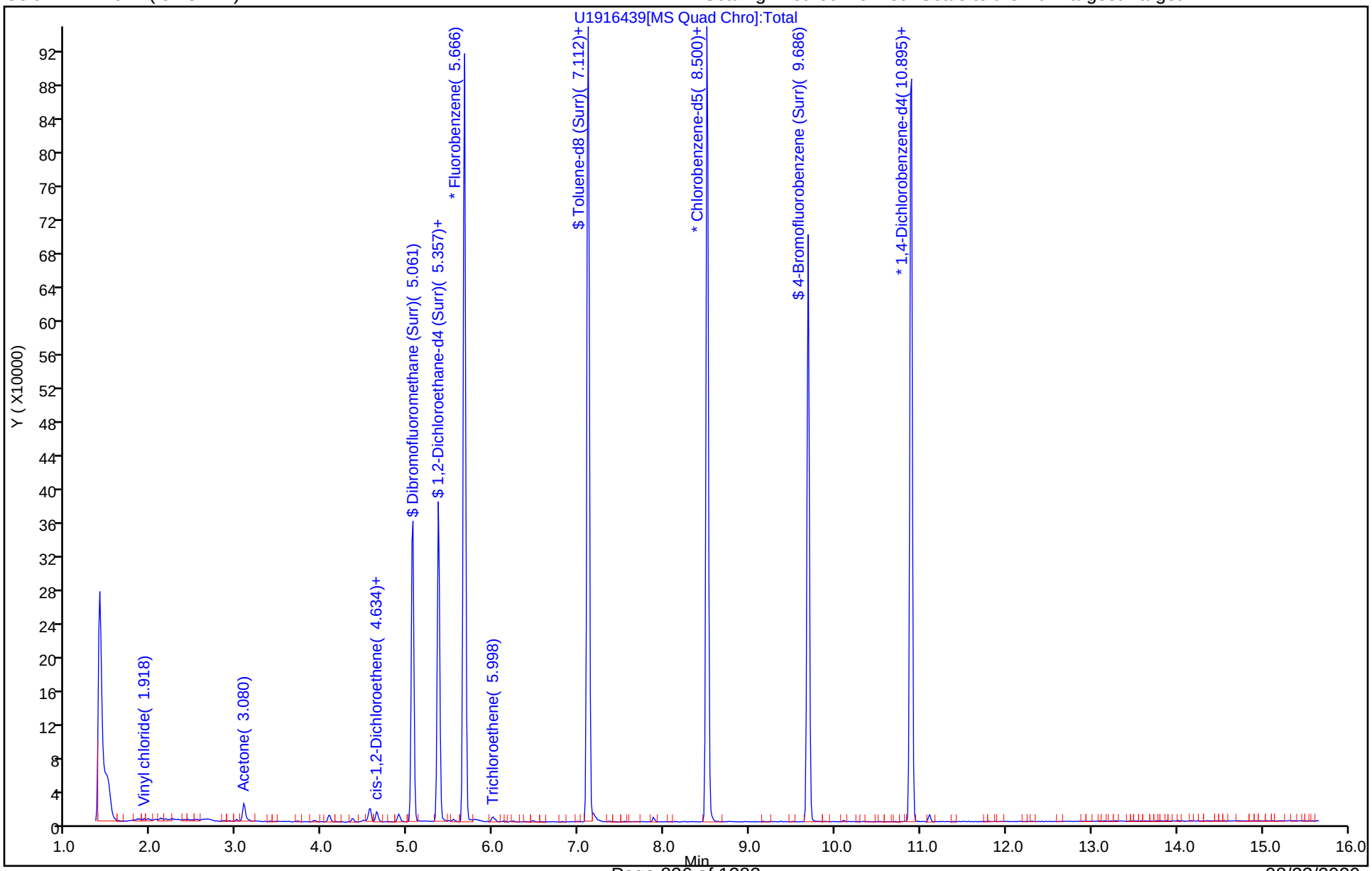
Report Date: 19-Aug-2020 13:42:32 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916439.d

Injection Date:	19-Aug-2020 02:10:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-C-32	Lab Sample ID:	240-134931-32	Worklist Smp#:	22
Client ID:	MSA-SW48A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916439.d
Lims ID: 240-134931-C-32
Client ID: MSA-SW48A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 02:10:28 ALS Bottle#: 0 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-022
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:42:32 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

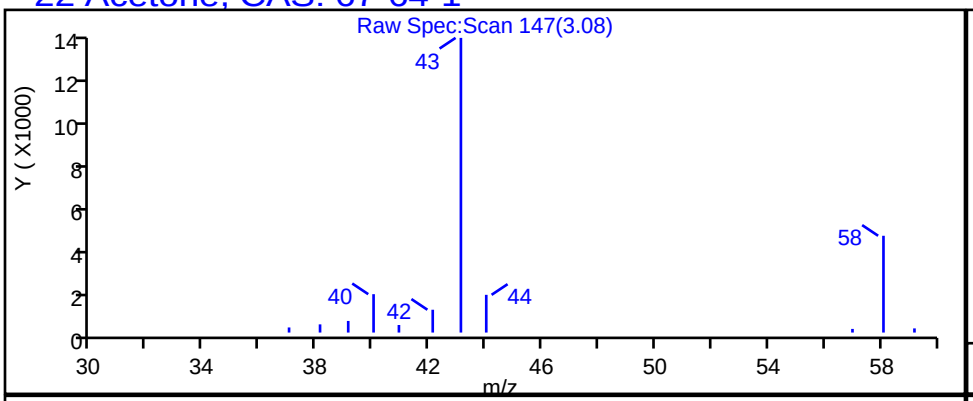
First Level Reviewer: laveyt Date: 19-Aug-2020 13:42:32

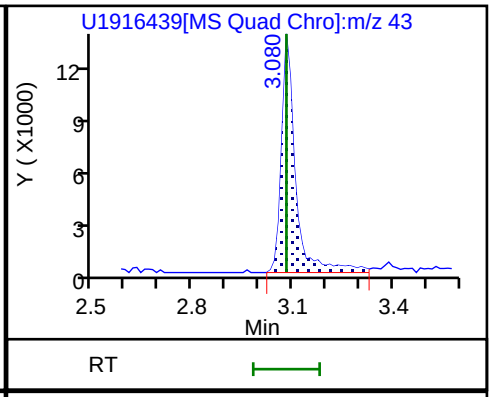
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.59
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.59
$ 6 Toluene-d8 (Surr)	20.0	20.3	101.68
$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.62

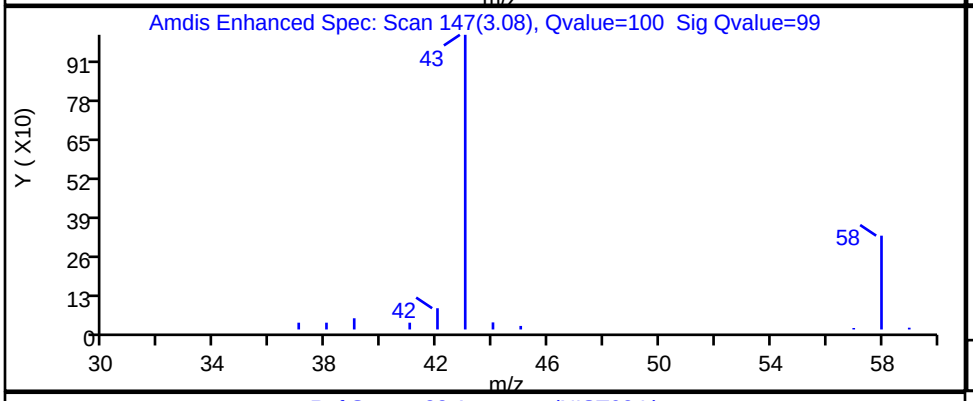
Eurofins TestAmerica, Canton

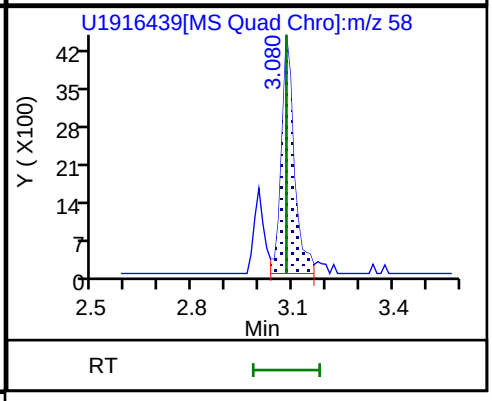
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916439.d		
Injection Date:	19-Aug-2020 02:10:28	Instrument ID:	A3UX19
Lims ID:	240-134931-C-32	Lab Sample ID:	240-134931-32
Client ID:	MSA-SW48A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

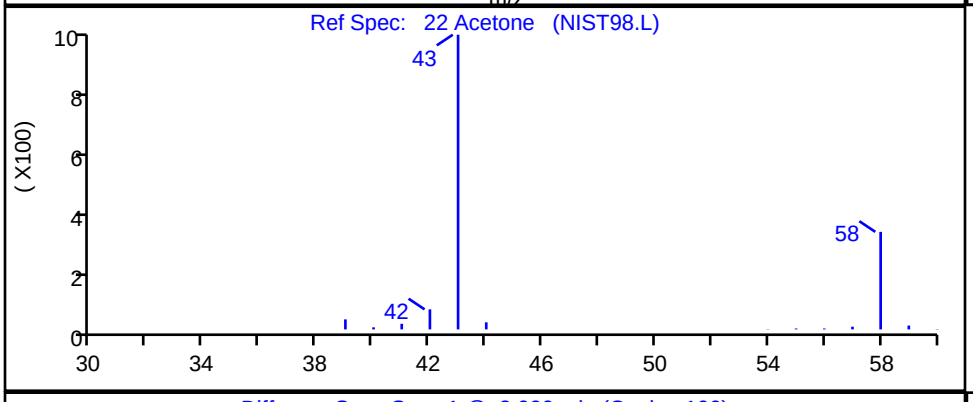
22 Acetone, CAS: 67-64-1

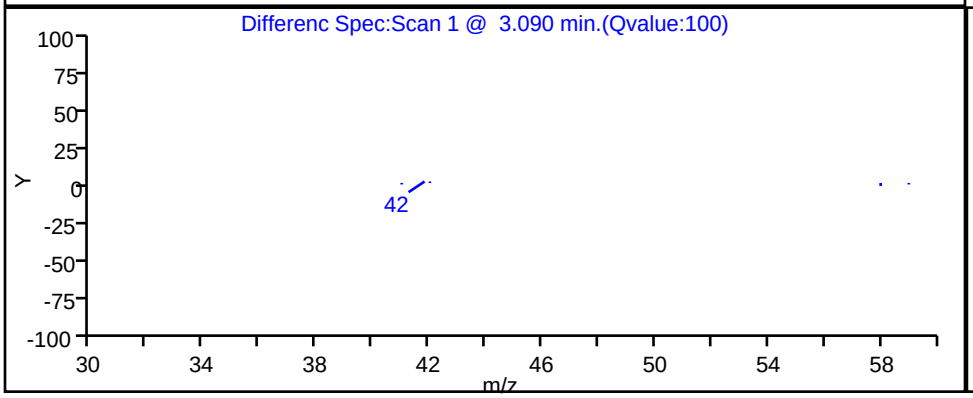


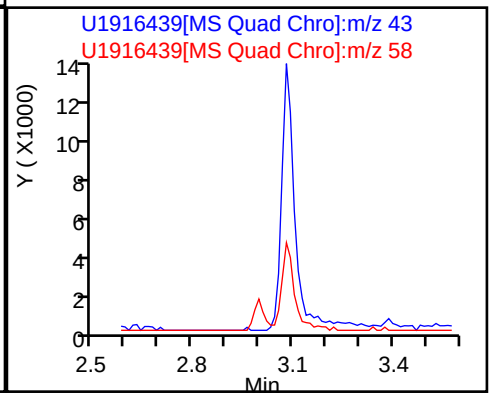












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U *	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.83
67-66-3	Chloroform	1.0	U	1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	0.50	J	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42
124-48-1	Dibromochloromethane	1.0	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	93		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916419.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 04:13

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.: 447506 Units: ug/L

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916419.d
Lims ID: 240-134931-B-33
Client ID: MSA-SW49A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 04:13:58 ALS Bottle#: 0 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-032
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:53:32 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:53:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	864276	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	634213	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	315957	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	249608	21.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	282552	21.1	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	804218	21.1	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	267579	18.7	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	U
12 Vinyl chloride	62	1.918	1.918	0.000	92	3462	0.2689	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.321				ND	
17 Trichlorofluoromethane	101		2.547				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	99	37789	11.2	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.590	3.590	0.000	6	369	0.3153	
32 trans-1,2-Dichloroethene	61		3.744				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.124				ND	
36 Vinyl acetate	43		4.160				ND	
37 Isopropyl ether	87		4.171				ND	
39 Tert-butyl ethyl ether	59		4.492				ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	99	2539	1.24	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	78	6299	0.5043	
42 2,2-Dichloropropane	77		4.646				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.919				ND	
49 1,1,1-Trichloroethane	97		5.096				ND	
52 Carbon tetrachloride	117		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 1,1-Dichloropropene	75		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.512				ND	
59 Trichloroethene	130	5.998	5.998	0.000	94	3876	0.2838	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.709				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.540				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

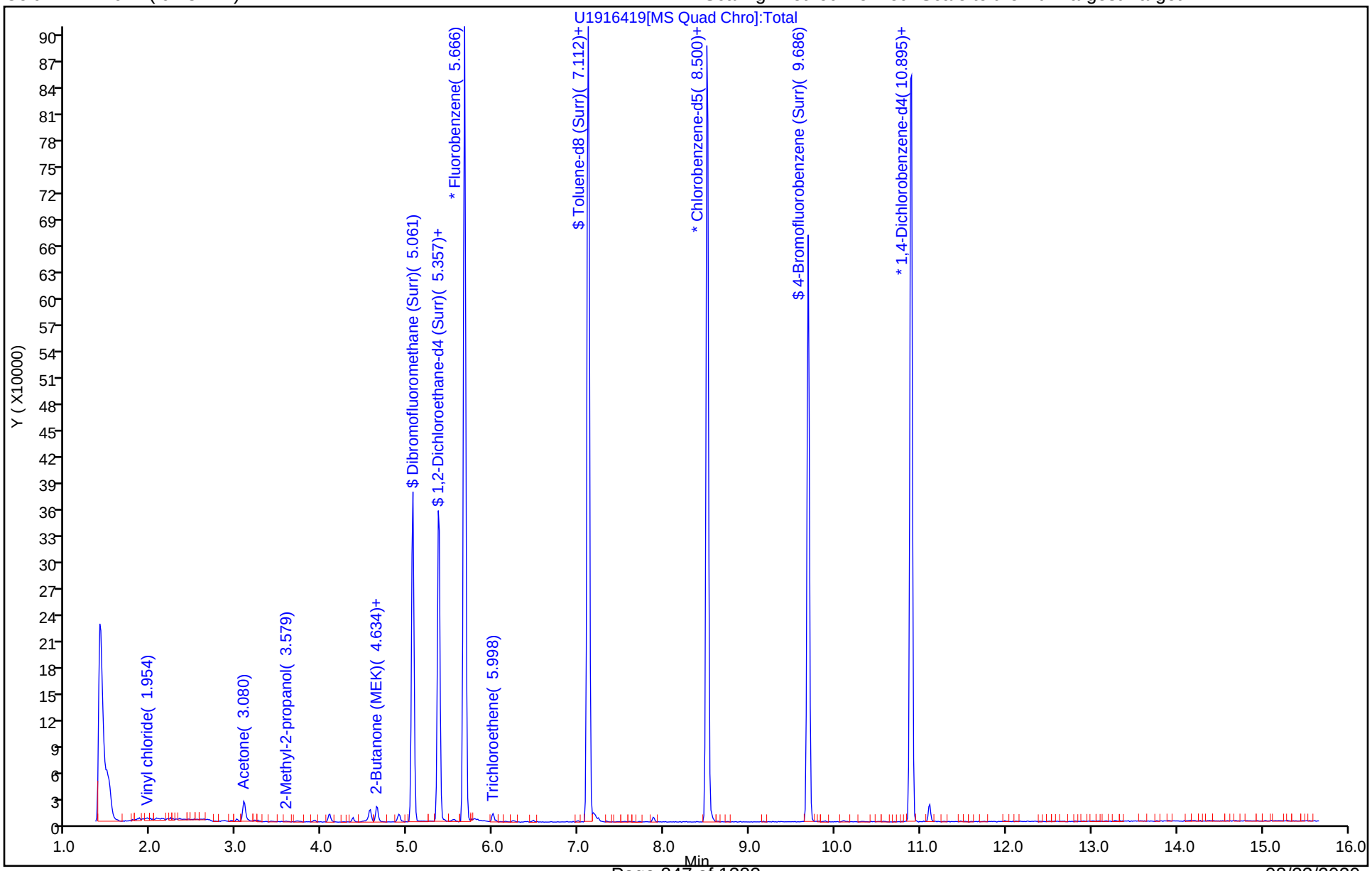
Report Date: 18-Aug-2020 14:53:32 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916419.d

Injection Date:	18-Aug-2020 04:13:58	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-B-33	Lab Sample ID:	240-134931-33	Worklist Smp#:	32
Client ID:	MSA-SW49A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916419.d
Lims ID: 240-134931-B-33
Client ID: MSA-SW49A-081220
Sample Type: Client
Inject. Date: 18-Aug-2020 04:13:58 ALS Bottle#: 0 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-032
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 14:53:32 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 14:53:32

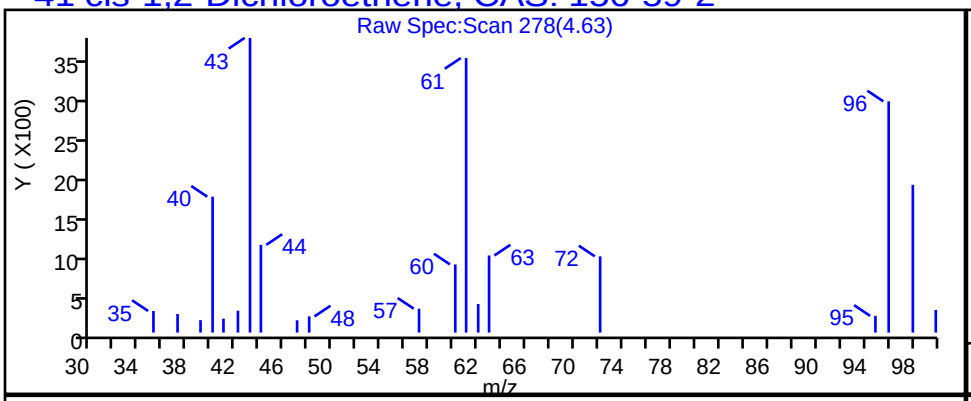
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.5	107.28
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.1	105.73
$ 6 Toluene-d8 (Surr)	20.0	21.1	105.73
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.7	93.49

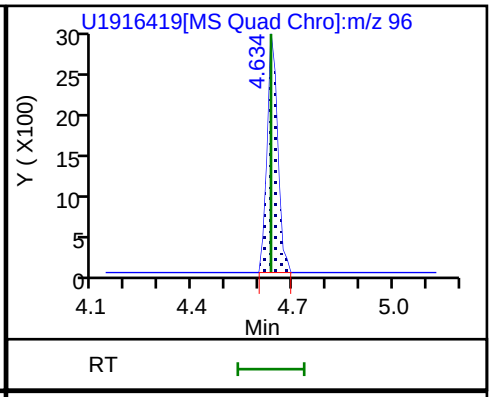
Report Date: 18-Aug-2020 14:53:33 Chrom Revision: 2.3 17-Aug-2020 20:42:08

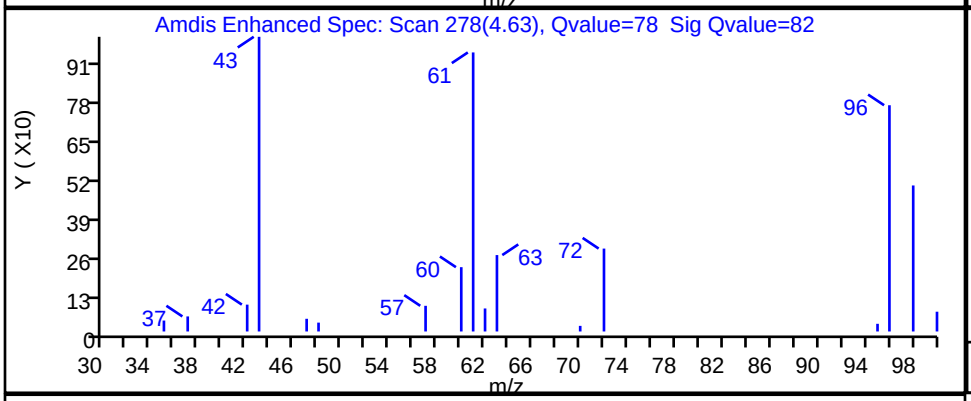
Eurofins TestAmerica, Canton

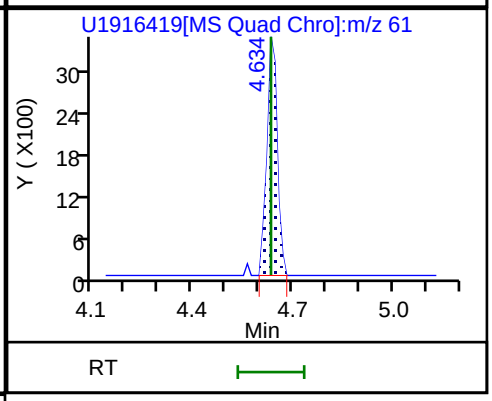
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916419.d				
Injection Date:	18-Aug-2020 04:13:58	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-33	Lab Sample ID:	240-134931-33		
Client ID:	MSA-SW49A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

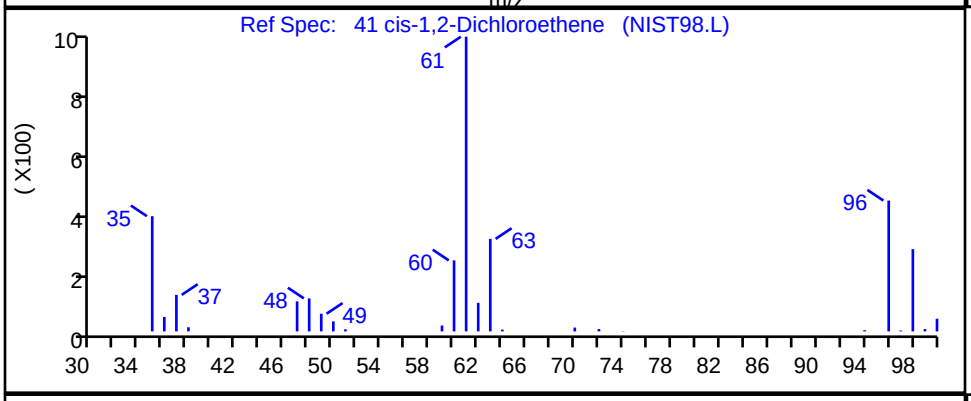
41 cis-1,2-Dichloroethene, CAS: 156-59-2

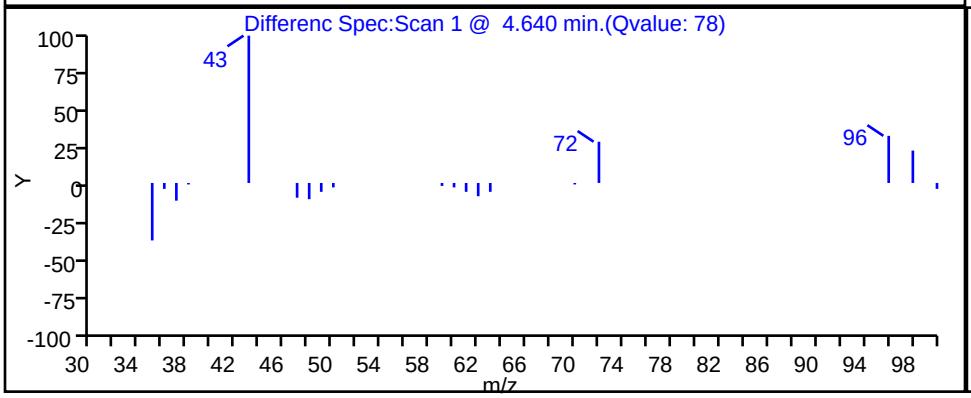


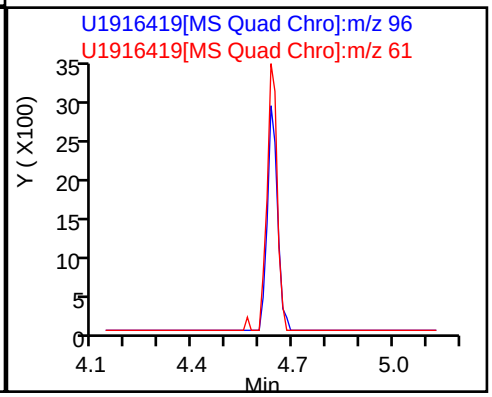












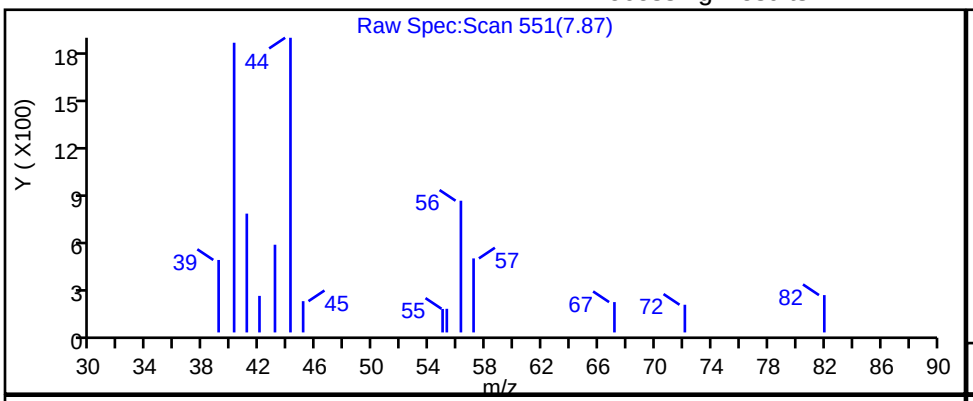
User Disabled Compound Report

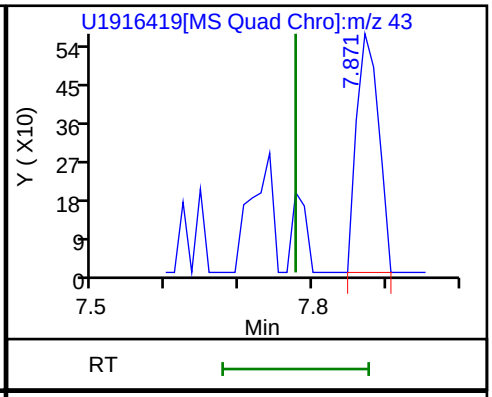
Eurofins TestAmerica, Canton

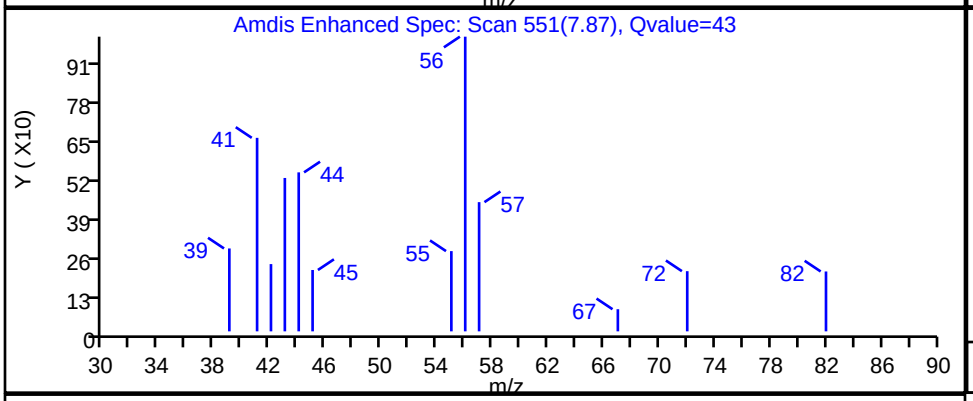
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916419.d				
Injection Date:	18-Aug-2020 04:13:58	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-33	Lab Sample ID:	240-134931-33		
Client ID:	MSA-SW49A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

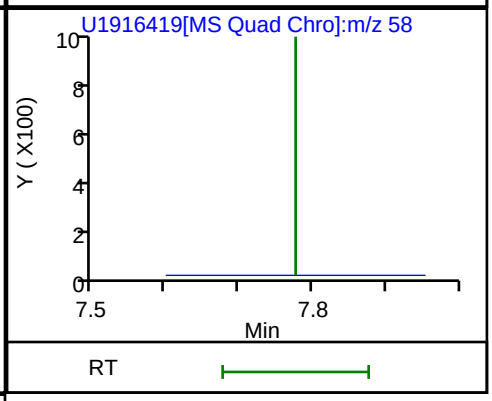
77 2-Hexanone, CAS: 591-78-6

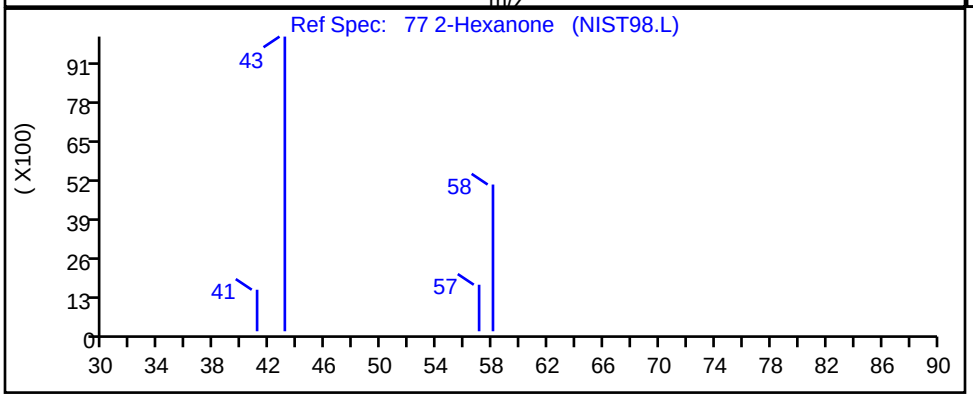
Processing Results











RT	Mass	Response	Amount
7.87	43.00	1184	0.118573
7.78	58.00	0	

Reviewer: laveyt, 18-Aug-2020 14:53:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

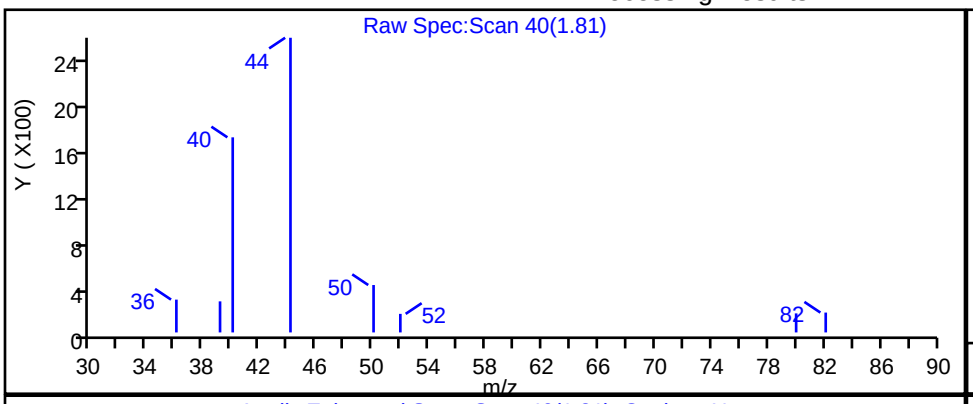
User Disabled Compound Report

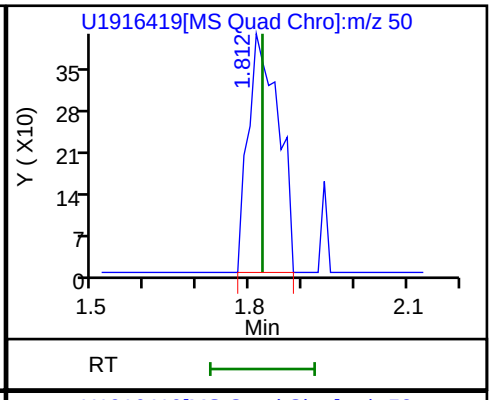
Eurofins TestAmerica, Canton

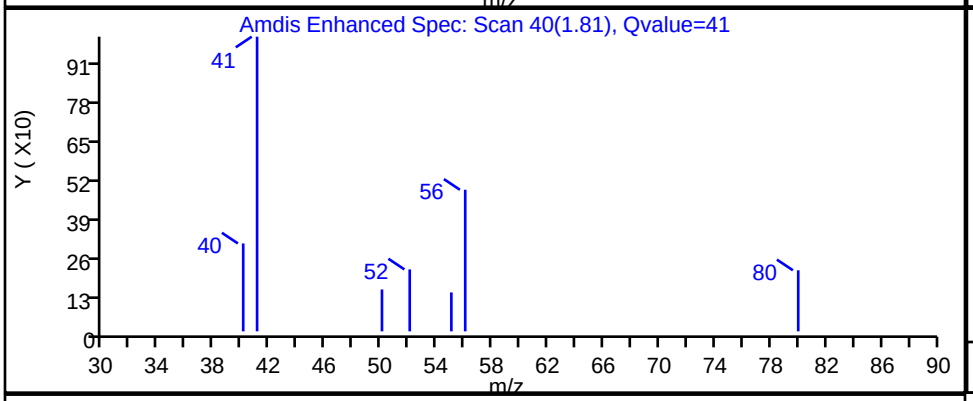
Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916419.d				
Injection Date:	18-Aug-2020 04:13:58	Instrument ID:	A3UX19		
Lims ID:	240-134931-B-33	Lab Sample ID:	240-134931-33		
Client ID:	MSA-SW49A-081220				
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	32
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

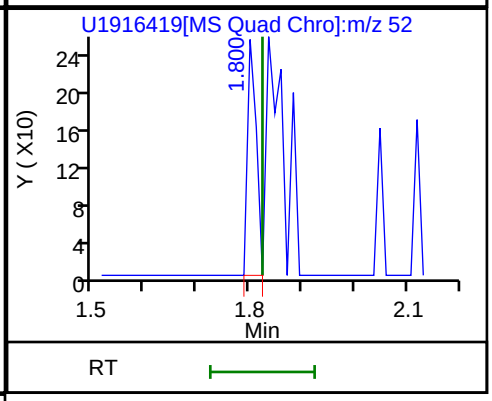
10 Chloromethane, CAS: 74-87-3

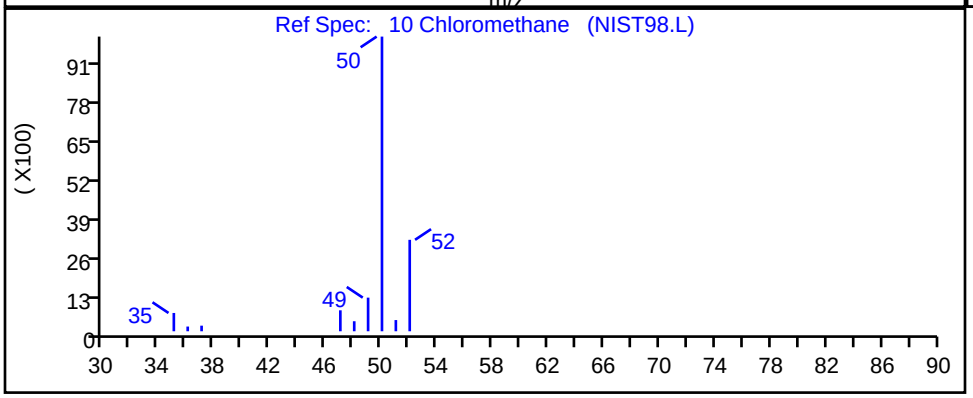
Processing Results











RT	Mass	Response	Amount
1.81	50.00	1632	0.130976
1.80	52.00	293	

Reviewer: laveyt, 18-Aug-2020 14:53:03

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916440.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	12		5.0	5.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		75-130
460-00-4	4-Bromofluorobenzene (Surr)	94		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	107		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: MSA-SW49A-081220 Lab Sample ID: 240-134931-33

Matrix: Water Lab File ID: U1916440.d

Analysis Method: 8260C Date Collected: 08/12/2020 09:14

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 02:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916440.d
Lims ID: 240-134931-A-33
Client ID: MSA-SW49A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 02:32:53 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-023
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 13:43:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	875258	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	633097	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	310423	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	252663	21.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	287452	21.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	821583	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.685	9.686	-0.001	91	268404	18.8	
9 Dichlorodifluoromethane	85		1.610				ND	
10 Chloromethane	50		1.823				ND	
12 Vinyl chloride	62	1.906	1.918	-0.012	78	4118	0.3158	
13 Bromomethane	94		2.250				ND	
15 Chloroethane	64		2.310				ND	
17 Trichlorofluoromethane	101		2.535				ND	
20 1,1-Dichloroethene	61		3.033				ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069				ND	
22 Acetone	43	3.080	3.080	0.000	100	39774	11.6	
25 Carbon disulfide	76		3.246				ND	
29 Methylene Chloride	49		3.484				ND	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	17	793	0.6691	
32 trans-1,2-Dichloroethene	61		3.733				ND	
33 Methyl tert-butyl ether	73		3.744				ND	
35 1,1-Dichloroethane	63		4.112				ND	
36 Vinyl acetate	43		4.148				ND	
37 Isopropyl ether	87		4.183				ND	
39 Tert-butyl ethyl ether	59		4.503				ND	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	77	6159	0.4869	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	97	2475	1.20	
42 2,2-Dichloropropane	77		4.634				ND	
46 Chlorobromomethane	49		4.847				ND	
48 Chloroform	83		4.907				ND	
49 1,1,1-Trichloroethane	97		5.085				ND	
51 1,1-Dichloropropene	75		5.239				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
52 Carbon tetrachloride	117		5.239				ND	
54 Benzene	78		5.417				ND	
55 1,2-Dichloroethane	62		5.428				ND	
56 Tert-amyl methyl ether	73		5.511				ND	
59 Trichloroethene	130	5.997	5.998	-0.001	94	3679	0.2660	
62 1,2-Dichloropropane	63		6.199				ND	
64 Dibromomethane	174		6.306				ND	
66 Dichlorobromomethane	83		6.436				ND	
68 2-Chloroethyl vinyl ether	63		6.697				ND	
69 cis-1,3-Dichloropropene	75		6.851				ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982				ND	
71 Toluene	91		7.172				ND	
72 trans-1,3-Dichloropropene	75		7.361				ND	
75 Tetrachloroethene	166		7.705				ND	
76 1,3-Dichloropropane	76		7.705				ND	
77 2-Hexanone	43		7.776				ND	U
79 Chlorodibromomethane	129		7.931				ND	
81 Ethylene Dibromide	107		8.049				ND	
83 Chlorobenzene	112		8.535				ND	
84 1,1,1,2-Tetrachloroethane	131		8.607				ND	
85 Ethylbenzene	106		8.642				ND	
86 m-Xylene & p-Xylene	106		8.749				ND	
87 o-Xylene	106		9.152				ND	
88 Styrene	104		9.164				ND	
89 Bromoform	173		9.354				ND	
90 Isopropylbenzene	105		9.532				ND	
93 1,1,2,2-Tetrachloroethane	83		9.816				ND	
95 Bromobenzene	156		9.852				ND	
96 1,2,3-Trichloropropane	110		9.875				ND	
98 N-Propylbenzene	120		9.947				ND	
100 2-Chlorotoluene	126		10.041				ND	
102 4-Chlorotoluene	126		10.160				ND	
103 tert-Butylbenzene	119		10.480				ND	
105 1,2,4-Trimethylbenzene	105		10.528				ND	
106 sec-Butylbenzene	105		10.706				ND	
107 1,3-Dichlorobenzene	146		10.824				ND	
108 4-Isopropyltoluene	119		10.860				ND	
109 1,4-Dichlorobenzene	146		10.919				ND	
110 1,2,3-Trimethylbenzene	105		10.966				ND	
112 n-Butylbenzene	91		11.287				ND	
113 1,2-Dichlorobenzene	146		11.310				ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129				ND	
116 1,2,4-Trichlorobenzene	180		13.018				ND	
117 Hexachlorobutadiene	225		13.208				ND	
118 Naphthalene	128		13.279				ND	
119 1,2,3-Trichlorobenzene	180		13.552				ND	
S 128 Xylenes, Total	106		16.520				ND	
T 131 Chlorodifluoromethane TIC	51		1.640				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

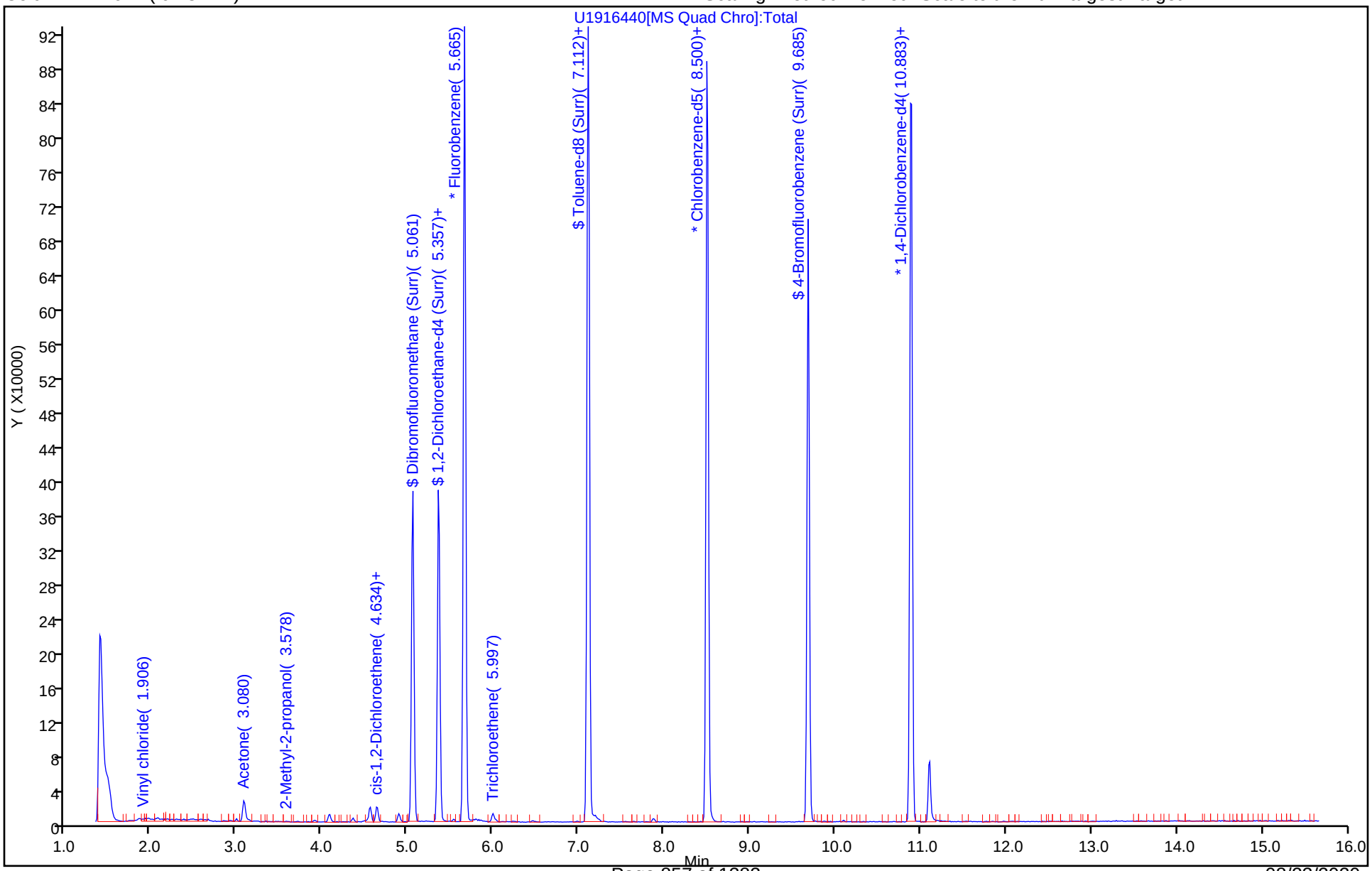
Report Date: 19-Aug-2020 13:43:10 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916440.d

Injection Date:	19-Aug-2020 02:32:53	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	240-134931-A-33	Lab Sample ID:	240-134931-33	Worklist Smp#:	23
Client ID:	MSA-SW49A-081220				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916440.d
Lims ID: 240-134931-A-33
Client ID: MSA-SW49A-081220
Sample Type: Client
Inject. Date: 19-Aug-2020 02:32:53 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-023
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 13:43:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

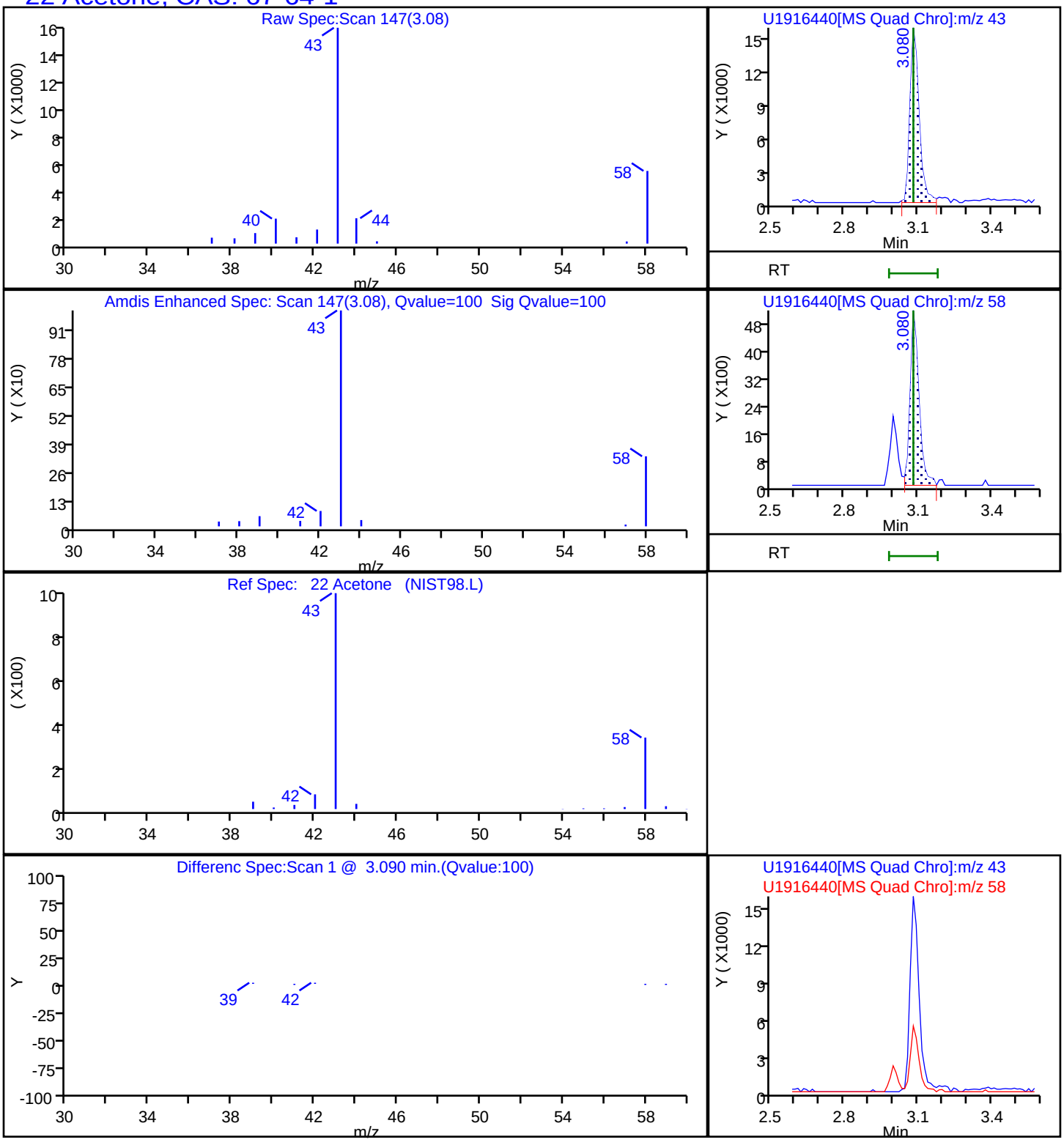
First Level Reviewer: laveyt Date: 19-Aug-2020 13:43:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.4	107.23
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	21.2	106.22
$ 6 Toluene-d8 (Surr)	20.0	21.6	108.21
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.8	93.94

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916440.d		
Injection Date:	19-Aug-2020 02:32:53	Instrument ID:	A3UX19
Lims ID:	240-134931-A-33	Lab Sample ID:	240-134931-33
Client ID:	MSA-SW49A-081220		
Operator ID:	001904	ALS Bottle#:	0 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_19	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

22 Acetone, CAS: 67-64-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
2-Methyl-2-propanol	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 (MEK)	0.0615 0.0642	0.0597 +++++	0.0632	0.0607	0.0645	Ave		0.0623			0.0100	3.2		20.0			
Chlorobromomethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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			
Dichlorobromomethane	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 (MIBK)	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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			
Chlorodibromomethane	0.3436 0.3509	0.3261 0.3352	0.3393	0.3492	0.3738	Ave		0.3454				4.4		20.0			
Ethylene Dibromide	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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			
4-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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
2-Methyl-2-propanol	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 (MEK)	FB	Ave	3739 482200	7212 +++++	78345	151425	322049	1.00 120	2.00 +++++	20.0	40.0	80.0
Chlorobromomethane	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
Dichlorobromomethane	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 (MIBK)	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
Chlorodibromomethane	CBNZ d5	Ave	7003 919717	13420 1130859	141322	298689	633936	0.500 60.0	1.00 80.0	10.0	20.0	40.0
Ethylene Dibromide	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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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
4-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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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				

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Apr-2019 14:10:30 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-008
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:02 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 14:37:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1249296	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	83	843322	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	90	455702	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	95	1285236	80.0	77.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	96	1393127	80.0	74.6	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	4492583	80.0	75.2	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	94	1650135	80.0	75.0	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	2052069	80.0	85.3	
10 Chloromethane	50	1.581	1.581	0.000	98	1789816	80.0	84.9	
11 Butadiene	54	1.640	1.640	0.000	88	1892418	80.0	81.7	
12 Vinyl chloride	62	1.664	1.675	-0.011	98	1934142	80.0	82.1	
14 Bromomethane	94	1.888	1.912	-0.024	90	953805	80.0	65.6	
15 Chloroethane	64	1.971	1.995	-0.024	99	1012997	80.0	68.5	
16 Dichlorofluoromethane	67	2.161	2.172	-0.011	97	2290963	80.0	77.5	
17 Trichlorofluoromethane	101	2.208	2.220	-0.012	99	2071934	80.0	78.9	
19 Ethyl ether	59	2.433	2.433	0.000	89	1155554	80.0	73.2	
20 Acrolein	56		2.551				ND	ND	U
21 1,1-Dichloroethene	61	2.622	2.634	-0.012	98	2024854	80.0	78.4	
22 1,1,2-Trichloro-1,2,2-trif	101	2.658	2.669	-0.011	93	1365935	80.0	79.9	
23 Acetone	43		2.693				ND	ND	U
24 Iodomethane	142	2.764	2.764	0.000	97	2125484	80.0	77.4	
25 Carbon disulfide	76	2.811	2.823	-0.012	99	4286373	80.0	72.1	
27 3-Chloro-1-propene	41	2.942	2.953	-0.011	93	2260088	80.0	76.8	
28 Methyl acetate	43		2.977				ND	ND	U
29 Methylene Chloride	49	3.048	3.060	-0.012	90	1730659	80.0	79.6	
30 2-Methyl-2-propanol	59		3.166				ND	ND	U
31 Acrylonitrile	53		3.273				ND	ND	U
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	98	1921542	80.0	75.7	
33 Methyl tert-butyl ether	73	3.297	3.285	0.011	94	3846016	80.0	73.3	
34 Hexane	57	3.510	3.510	0.000	90	2123105	80.0	76.6	
35 1,1-Dichloroethane	63	3.651	3.652	-0.001	96	2451944	80.0	77.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43		3.687				ND	ND	U
41 2,2-Dichloropropane	77	4.137	4.137	0.000	60	1612711	80.0	78.5	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	81	1657053	80.0	77.0	
42 2-Butanone (MEK)	72		4.149				ND	ND	U
46 Chlorobromomethane	49	4.338	4.338	0.000	94	1121143	80.0	74.4	
47 Tetrahydrofuran	42		4.373				ND	ND	U
48 Chloroform	83	4.397	4.397	0.000	93	2363996	80.0	78.1	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	2088351	80.0	80.4	
50 Cyclohexane	84	4.598	4.598	0.000	90	2381579	80.0	75.5	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	96	1971517	80.0	76.8	
52 Carbon tetrachloride	117	4.693	4.693	0.000	79	1755611	80.0	79.5	
53 Isobutyl alcohol	41		4.788				ND	ND	U
54 Benzene	78	4.870	4.870	0.000	96	5684570	80.0	77.3	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	1695389	80.0	74.9	
57 n-Heptane	57	5.071	5.071	0.000	90	1041160	80.0	77.0	
59 Trichloroethene	130	5.403	5.403	0.000	98	1509661	80.0	76.7	
61 Methylcyclohexane	83	5.568	5.568	0.000	86	2603437	80.0	73.8	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	93	1232396	80.0	79.3	
64 Dibromomethane	174	5.710	5.710	0.000	93	938835	80.0	71.2	
65 1,4-Dioxane	88	5.722	5.722	0.000	92	374894	1600.0	1499.9	
66 Dichlorobromomethane	83	5.829	5.829	0.000	100	1672281	80.0	78.8	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	1506274	160.0	133.5	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	97	1974815	80.0	76.5	
70 4-Methyl-2-pentanone (MIBK	43		6.349				ND	ND	U
71 Toluene	91	6.515	6.515	0.000	99	5446274	80.0	77.2	
72 trans-1,3-Dichloropropene	75	6.704	6.704	0.000	92	1708636	80.0	74.8	
74 Ethyl methacrylate	69	6.775	6.775	0.000	89	1510478	80.0	68.6	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	90	1023274	80.0	73.0	
76 Tetrachloroethene	166	7.000	7.000	0.000	96	1482922	80.0	79.1	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	88	1810575	80.0	72.8	
78 2-Hexanone	43		7.095				ND	ND	U
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	1130859	80.0	77.6	
81 Ethylene Dibromide	107	7.332	7.332	0.000	99	1071876	80.0	71.1	
83 Chlorobenzene	112	7.781	7.781	0.000	95	3494036	80.0	76.7	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	1305612	80.0	82.0	
85 Ethylbenzene	106	7.876	7.876	0.000	98	2013623	80.0	79.2	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	2480479	80.0	78.6	
87 o-Xylene	106	8.361	8.361	0.000	95	2491810	80.0	78.2	
88 Styrene	104	8.373	8.373	0.000	94	4024869	80.0	78.7	
89 Bromoform	173	8.550	8.550	0.000	98	780055	80.0	74.0	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	6501576	80.0	78.3	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	79	1530842	80.0	68.3	
93 Bromobenzene	156	9.000	9.000	0.000	89	1552619	80.0	78.6	
95 1,2,3-Trichloropropane	110		9.047				ND	ND	U
94 trans-1,4-Dichloro-2-buten	53		9.047				ND	ND	U
96 N-Propylbenzene	120	9.106	9.107	-0.001	98	1818752	80.0	80.9	
97 2-Chlorotoluene	126	9.189	9.189	0.000	97	1545785	80.0	82.1	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	5266204	80.0	81.3	
99 4-Chlorotoluene	126	9.296	9.296	0.000	99	1532612	80.0	78.9	
102 tert-Butylbenzene	119	9.592	9.592	0.000	91	4823562	80.0	82.0	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	5404391	80.0	80.6	
105 sec-Butylbenzene	105	9.805	9.805	0.000	94	6773871	80.0	80.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	3006850	80.0	77.3	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	5966210	80.0	81.5	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	3056952	80.0	76.4	
111 n-Butylbenzene	91	10.349	10.349	0.000	96	5107201	80.0	81.8	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	2947208	80.0	78.2	
113 1,2-Dibromo-3-Chloropropan	157		11.142				ND	ND	U
115 1,2,4-Trichlorobenzene	180	11.958	11.946	0.012	94	2200965	80.0	83.6	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	918998	80.0	79.0	
117 Naphthalene	128	12.195	12.195	0.000	97	5963618	80.0	72.2	
118 1,2,3-Trichlorobenzene	180	12.443	12.443	0.000	96	2040460	80.0	83.7	
S 124 Trihalomethanes, Total	1				0		320.0	308.6	
S 125 Total BTEX	1				0		400.0	390.4	
S 126 1,2-Dichloroethene, Total	96				0			152.7	
S 127 1,3-Dichloropropene, Total	75				0			151.3	
S 128 Xylenes, Total	106				0		160.0	156.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	64.00	Units: uL
vm50ss_00362	Amount Added:	64.00	Units: uL
vmarolistdw_00294	Amount Added:	64.00	Units: uL
vmrprimw_00331	Amount Added:	64.00	Units: uL

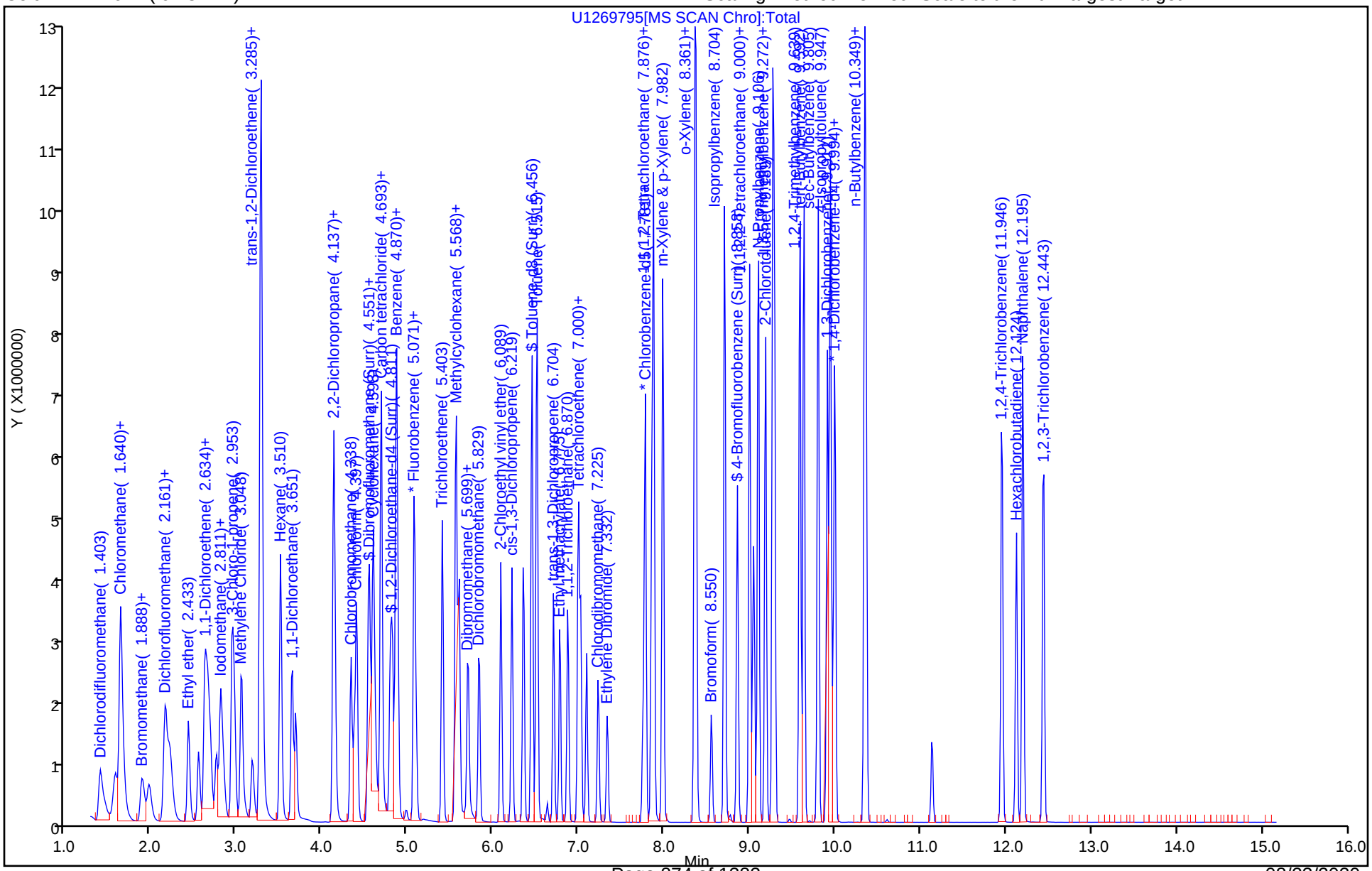
Report Date: 30-Apr-2019 17:22:08 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D

Injection Date:	30-Apr-2019 14:10:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L7			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



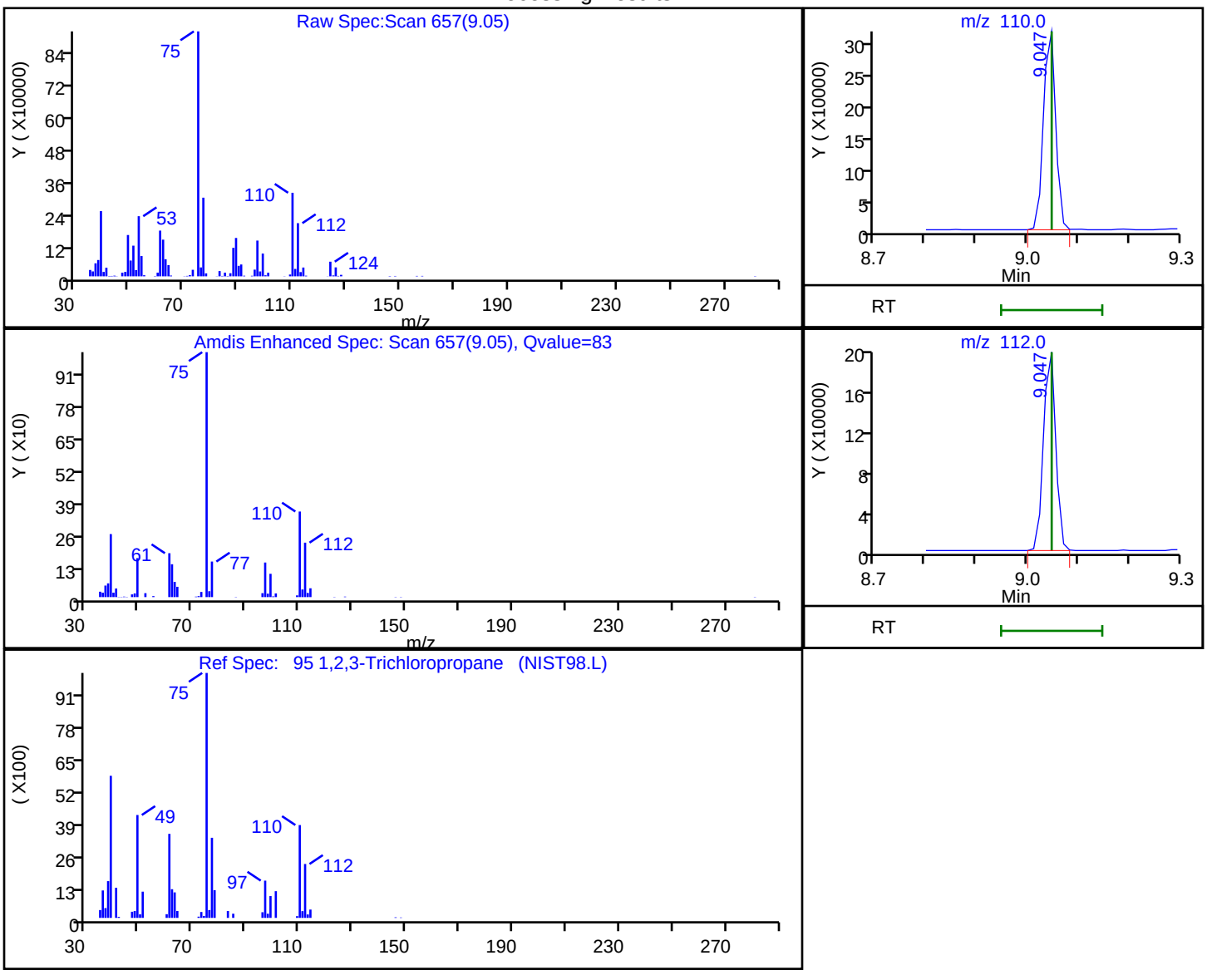
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

95 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results



RT	Mass	Response	Amount
9.05	110.00	523898	66.934030
9.05	112.00	334270	

Reviewer: laveyt, 30-Apr-2019 15:28:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

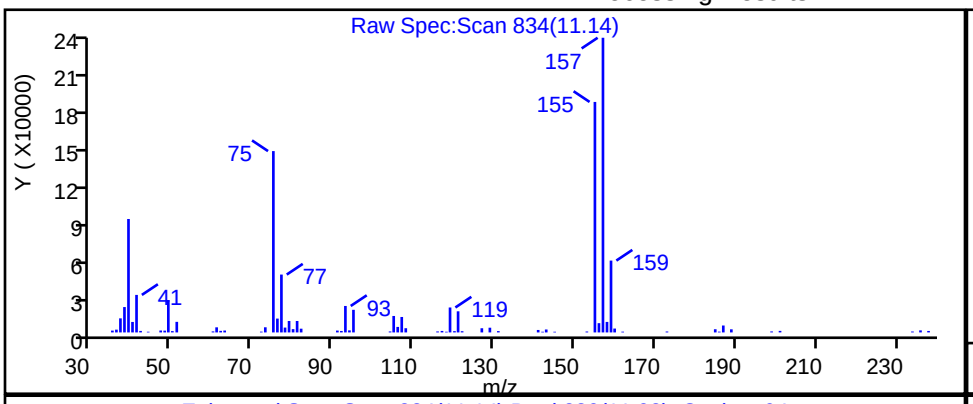
User Disabled Compound Report

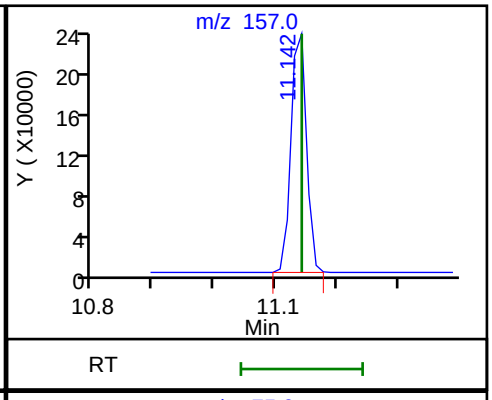
Eurofins TestAmerica, Canton

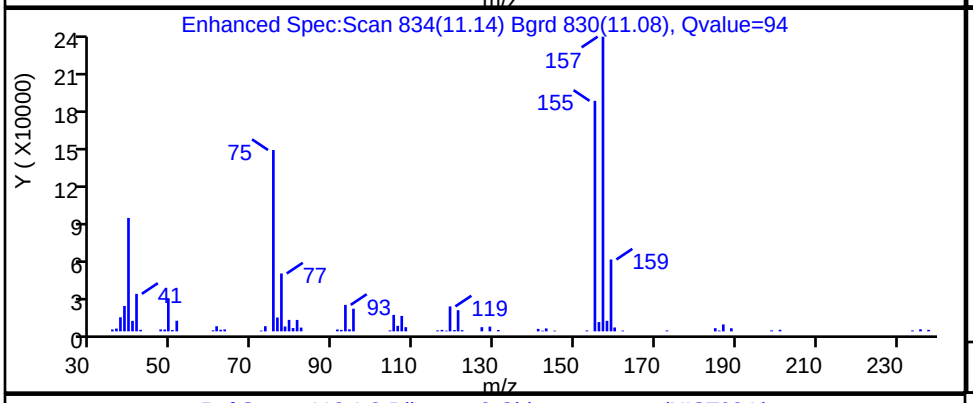
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

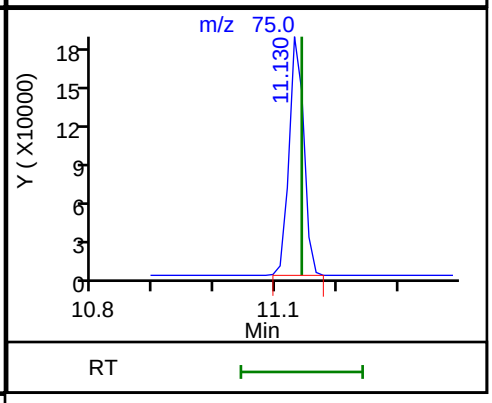
113 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

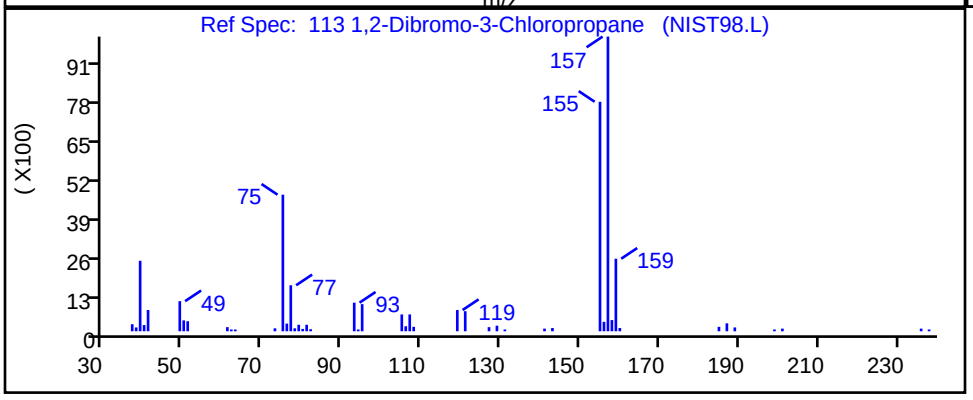
Processing Results











RT	Mass	Response	Amount
11.14	157.00	412663	59.798200
11.13	75.00	309605	

Reviewer: laveyt, 30-Apr-2019 15:29:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

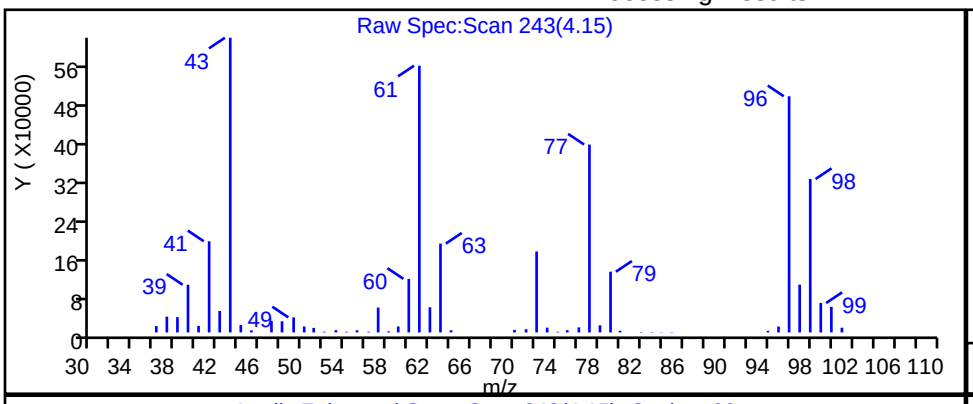
User Disabled Compound Report

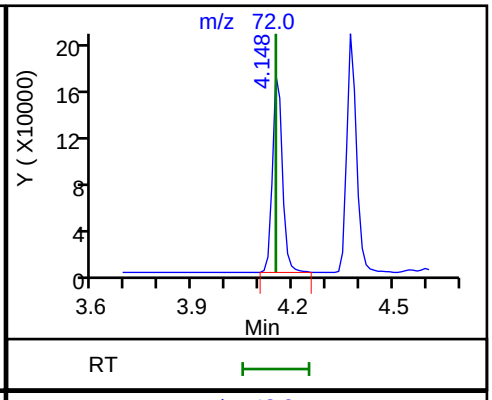
Eurofins TestAmerica, Canton

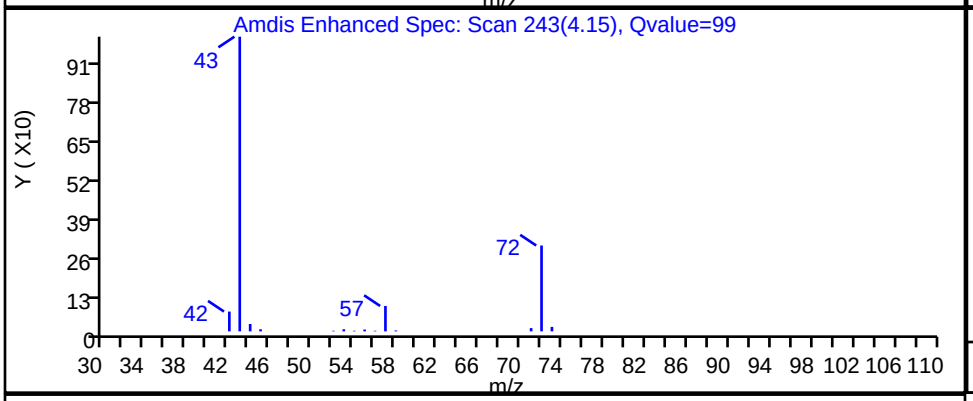
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

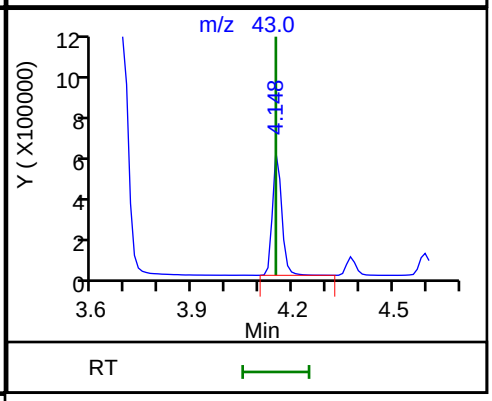
42 2-Butanone (MEK), CAS: 78-93-3

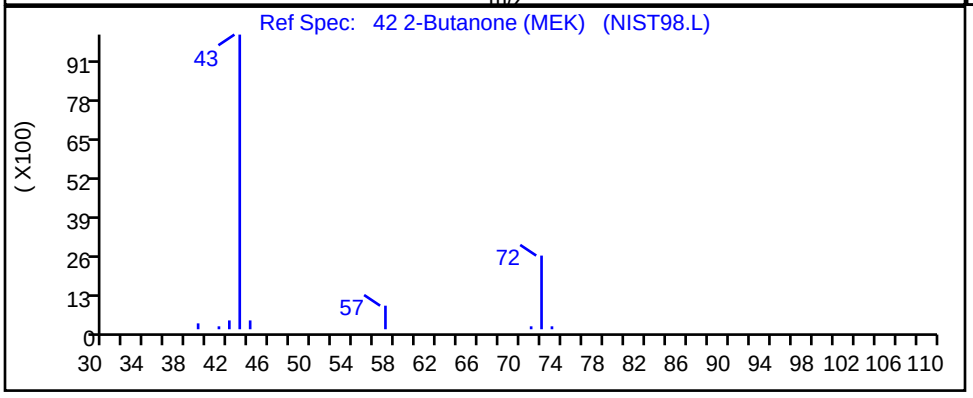
Processing Results











RT	Mass	Response	Amount
4.15	72.00	350699	102.8080
4.15	43.00	1190034	

Reviewer: laveyt, 30-Apr-2019 15:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

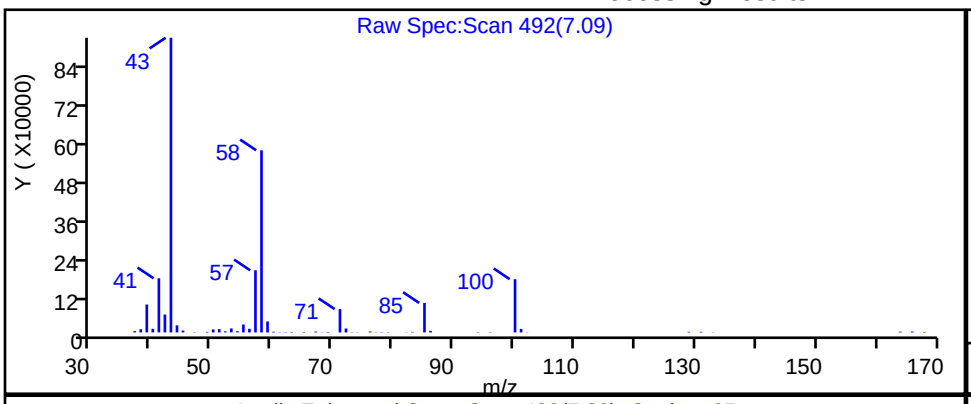
User Disabled Compound Report

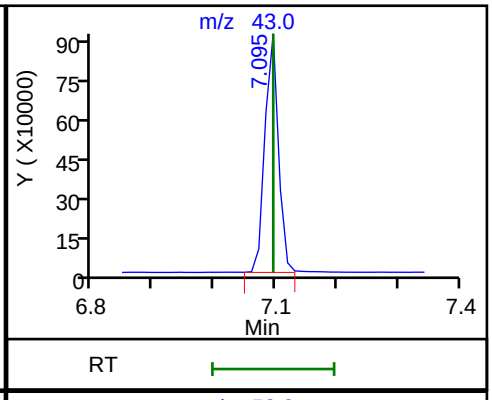
Eurofins TestAmerica, Canton

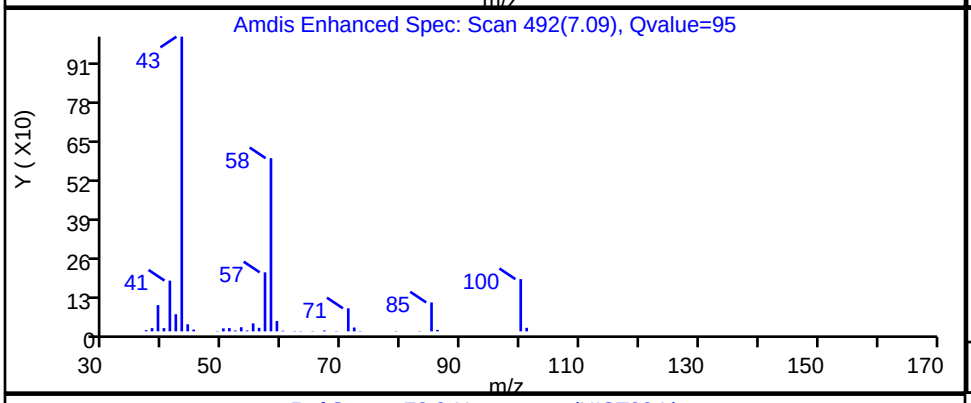
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

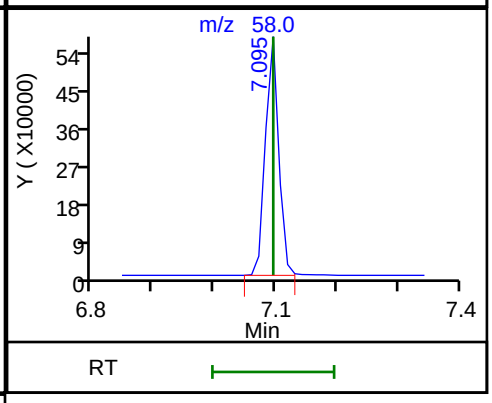
78 2-Hexanone, CAS: 591-78-6

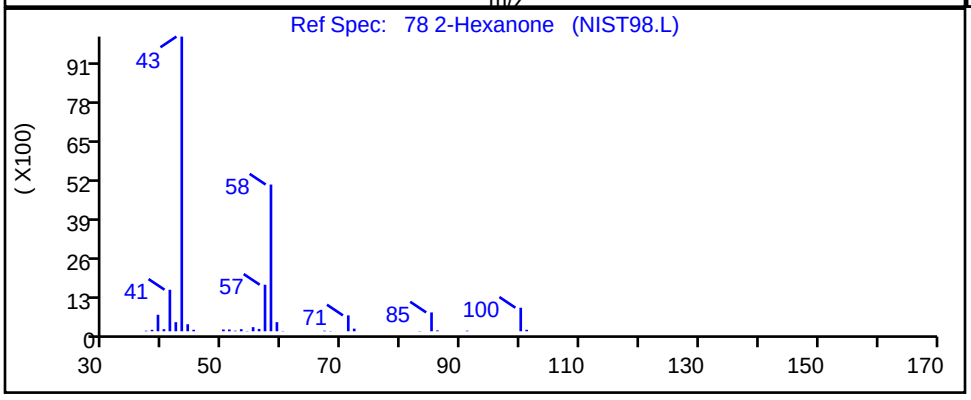
Processing Results











RT	Mass	Response	Amount
7.09	43.00	1429669	102.3875
7.09	58.00	868743	

Reviewer: laveyt, 30-Apr-2019 15:27:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

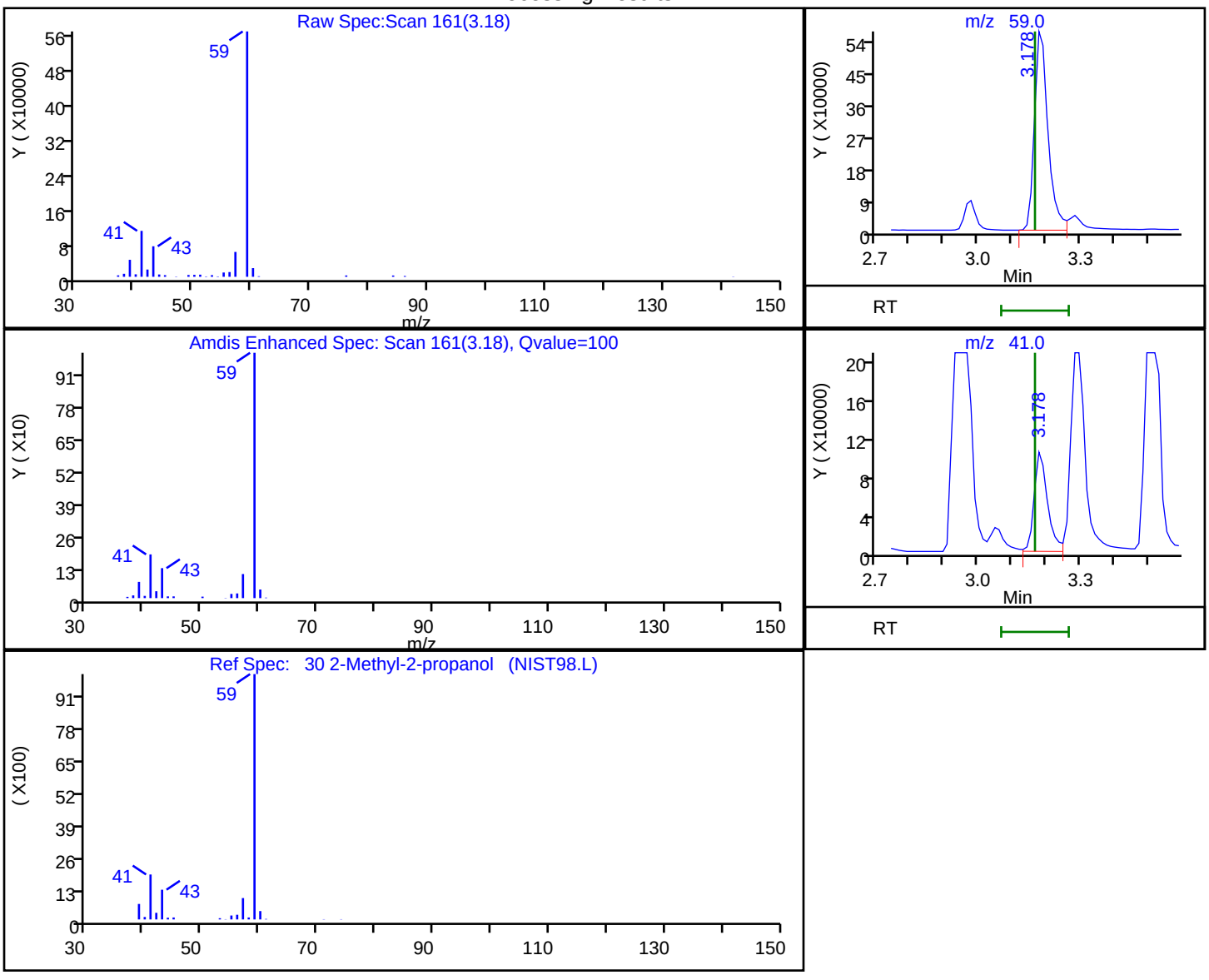
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

30 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results



RT	Mass	Response	Amount
3.18	59.00	1576196	442.0113
3.18	41.00	291950	

Reviewer: laveyt, 30-Apr-2019 15:24:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

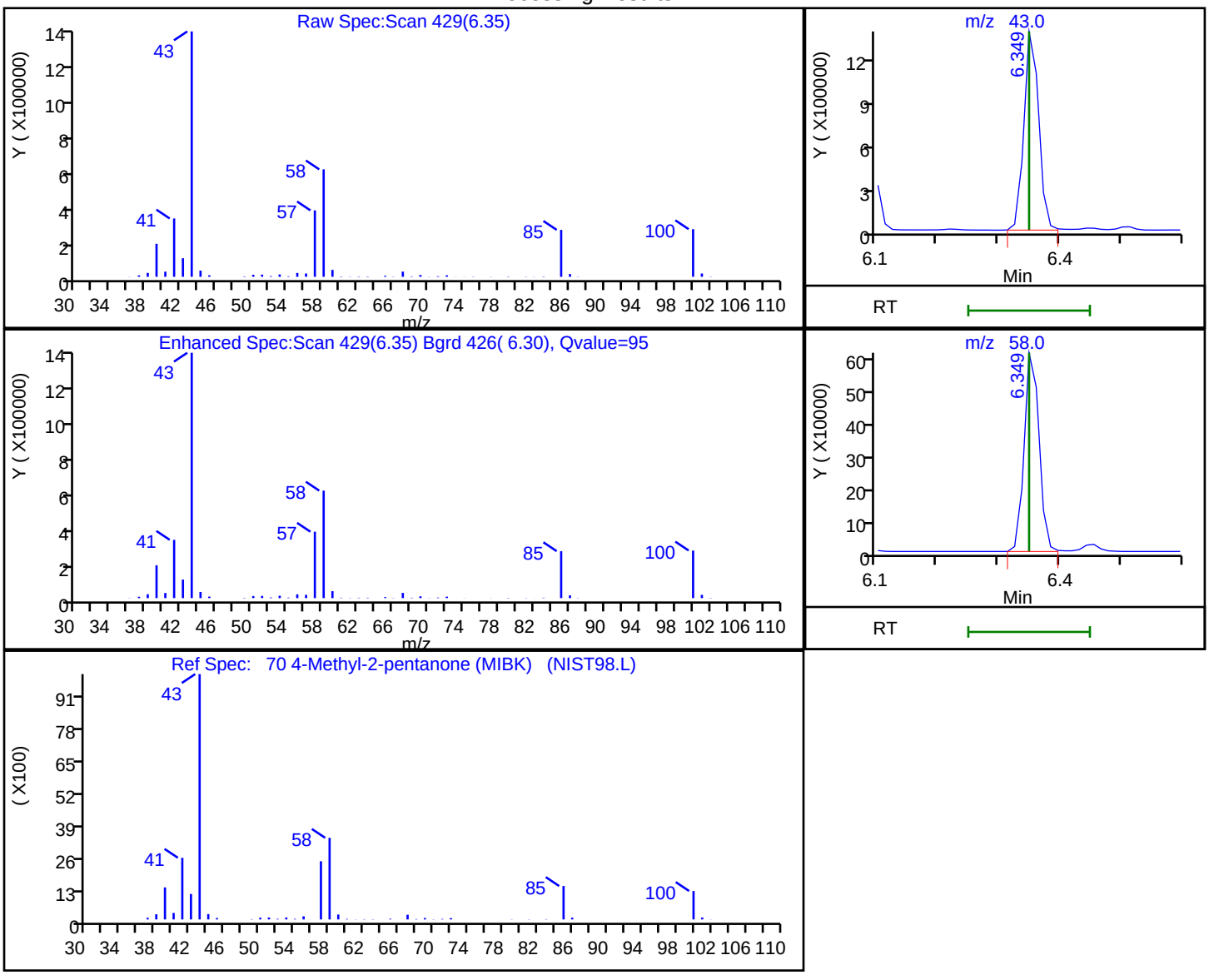
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

70 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.35	43.00	2351243	112.1448
6.35	58.00	1040187	

Reviewer: laveyt, 30-Apr-2019 15:26:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

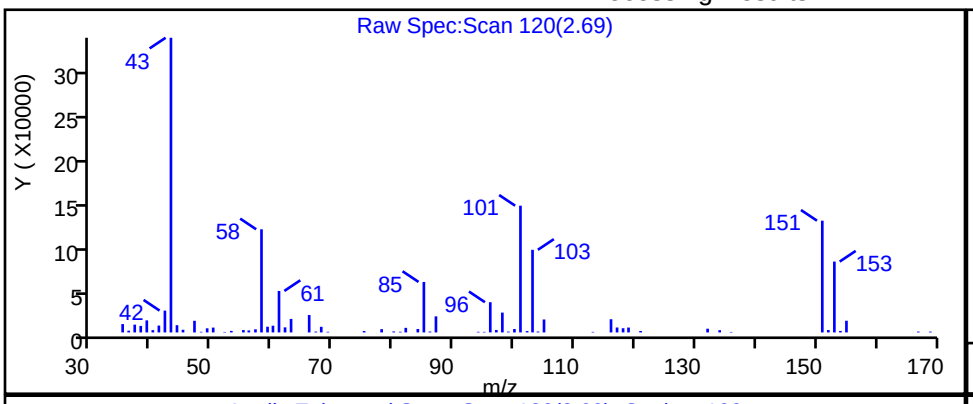
User Disabled Compound Report

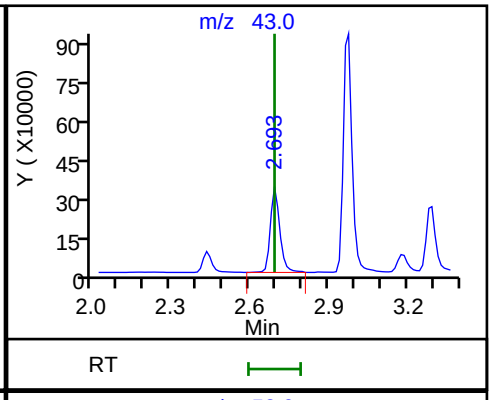
Eurofins TestAmerica, Canton

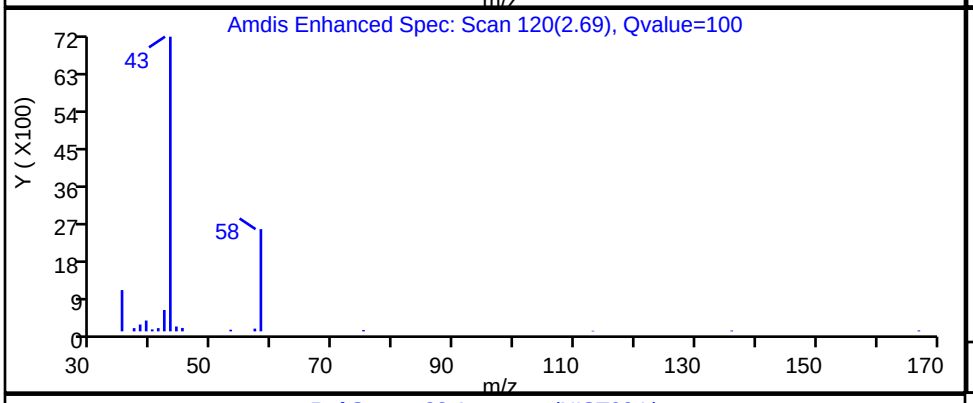
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

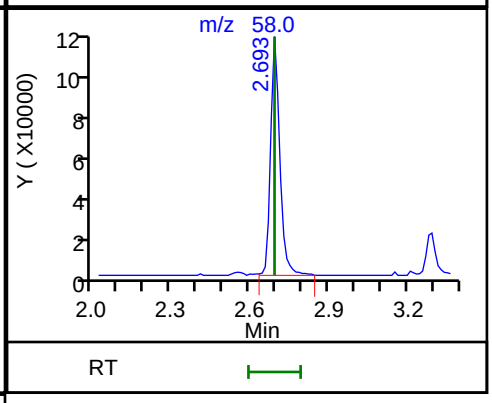
23 Acetone, CAS: 67-64-1

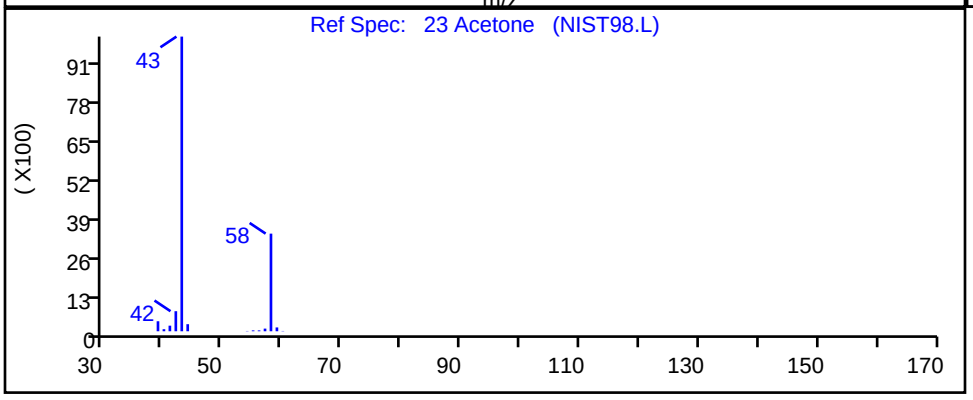
Processing Results











RT	Mass	Response	Amount
2.69	43.00	837854	108.1396
2.69	58.00	287960	

Reviewer: laveyt, 30-Apr-2019 15:23:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

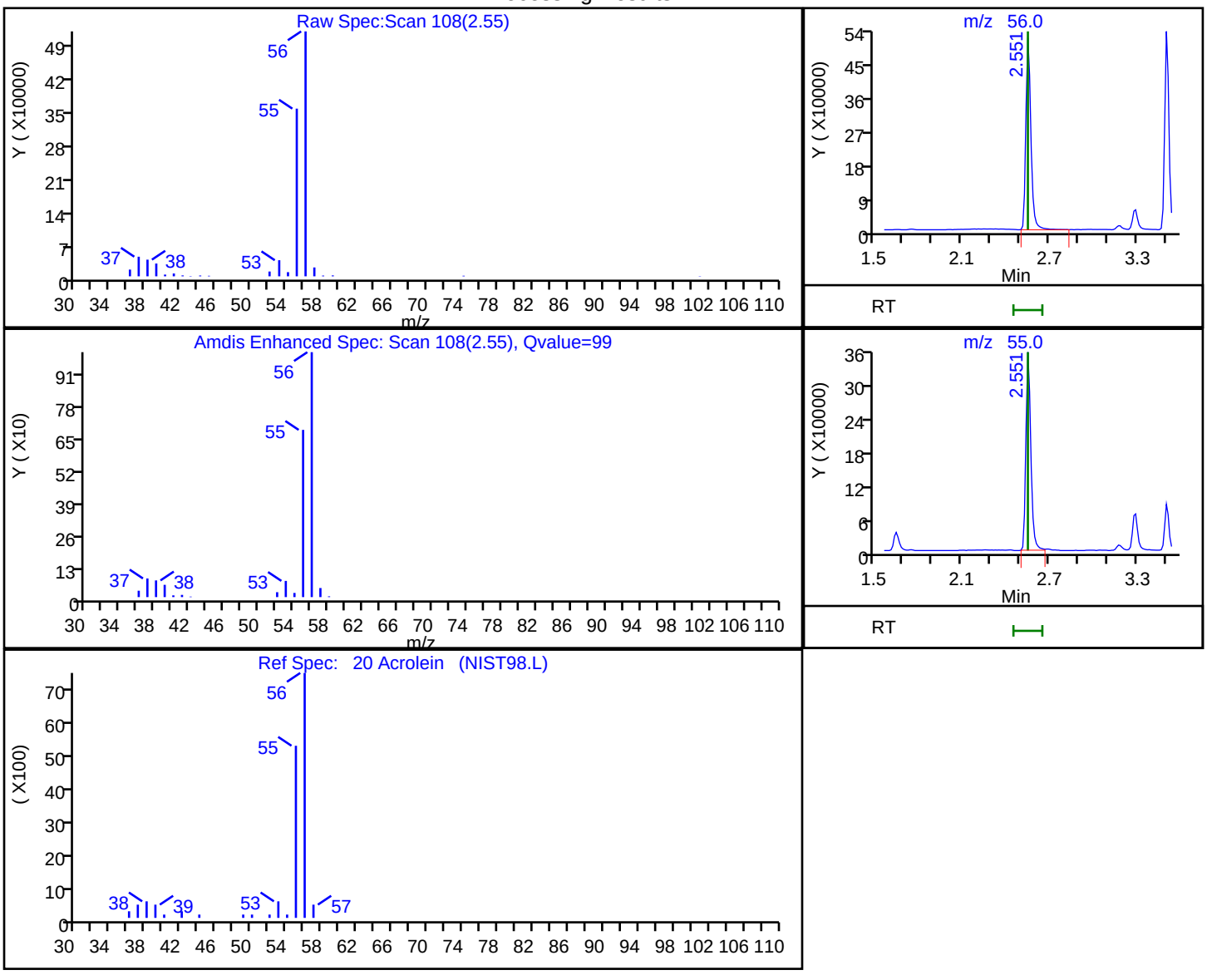
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D				
Injection Date:	30-Apr-2019 14:10:30	Instrument ID:	A3UX12		
Lims ID:	std8260 L7				
Client ID:					
Operator ID:	001904	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

20 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
2.55	56.00	1265832	303.9187
2.55	55.00	841550	

Reviewer: laveyt, 30-Apr-2019 15:23:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

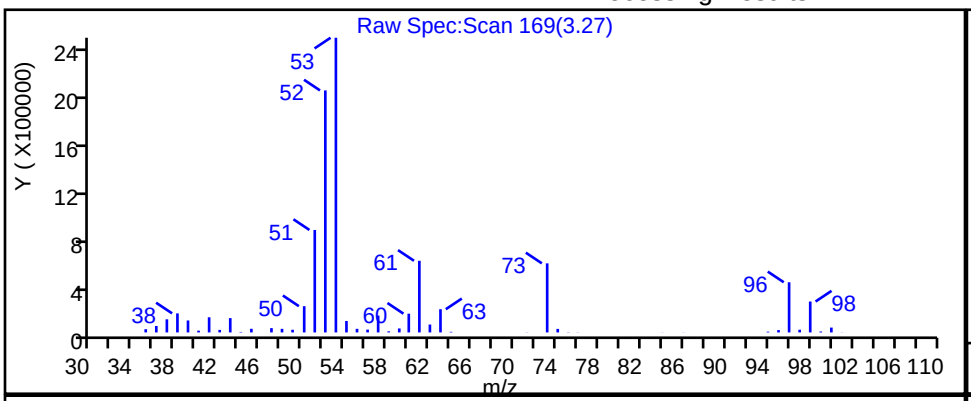
User Disabled Compound Report

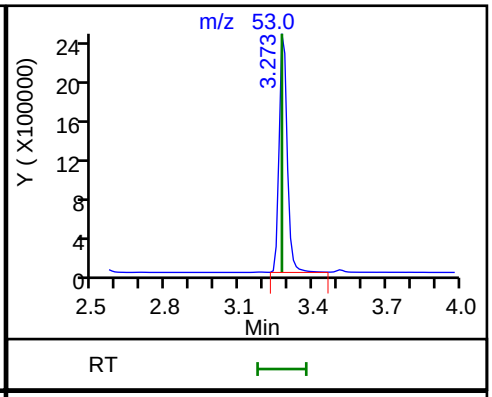
Eurofins TestAmerica, Canton

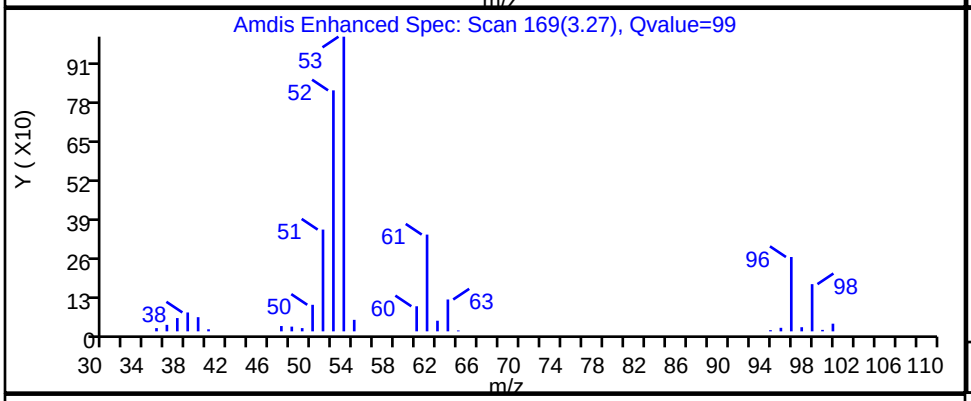
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

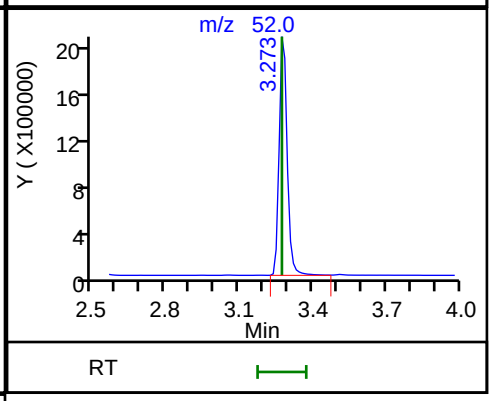
31 Acrylonitrile, CAS: 107-13-1

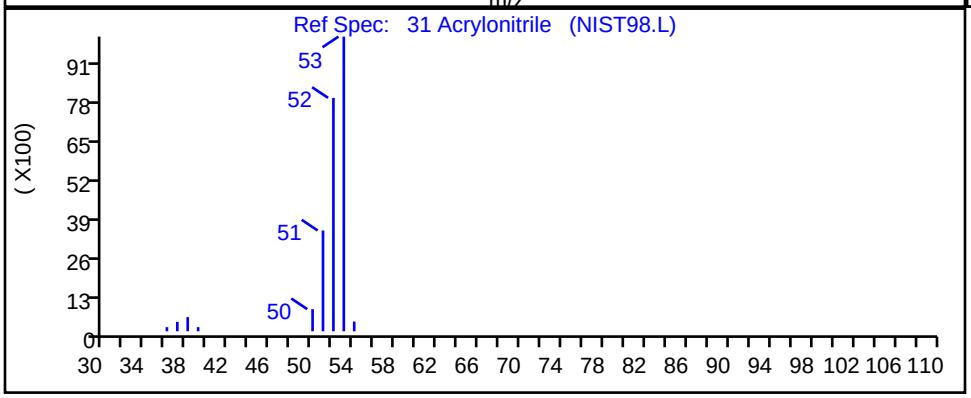
Processing Results











RT	Mass	Response	Amount
3.27	53.00	5744749	592.7333
3.27	52.00	4692139	

Reviewer: laveyt, 30-Apr-2019 15:24:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

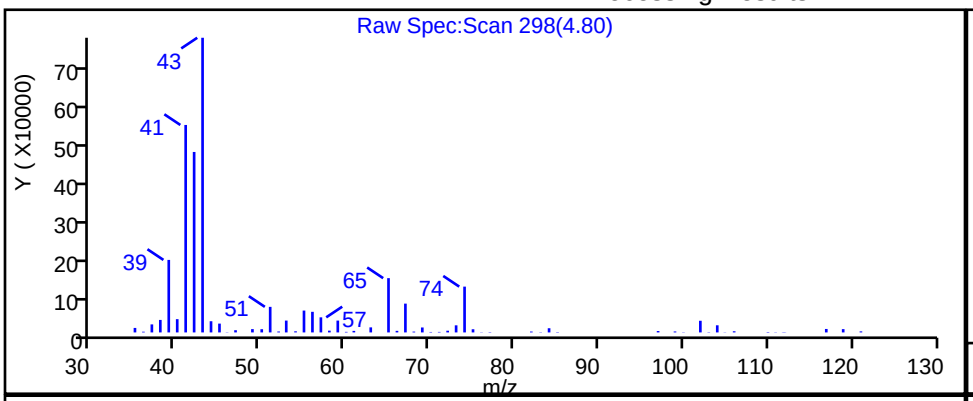
User Disabled Compound Report

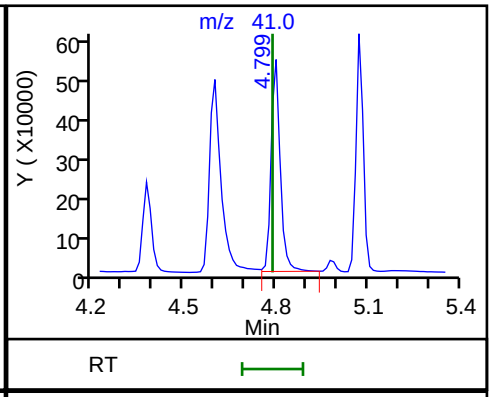
Eurofins TestAmerica, Canton

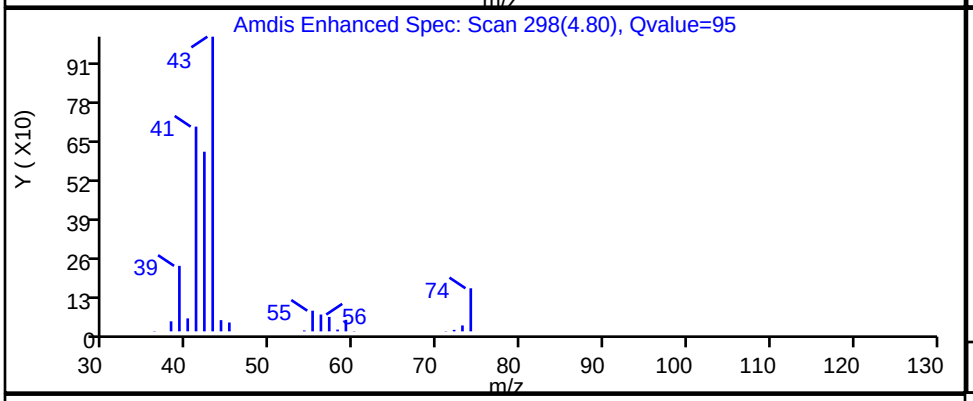
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

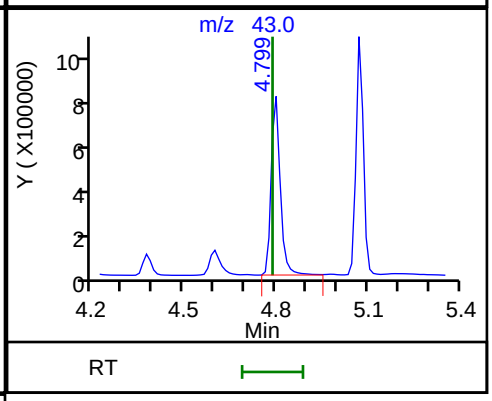
53 Isobutyl alcohol, CAS: 78-83-1

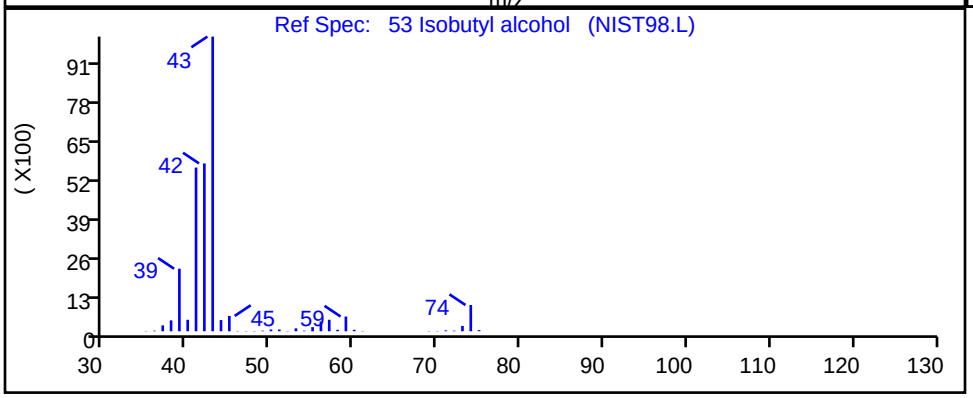
Processing Results











RT	Mass	Response	Amount
4.80	41.00	1138584	1133.5337
4.80	43.00	1619422	

Reviewer: laveyt, 30-Apr-2019 15:25:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

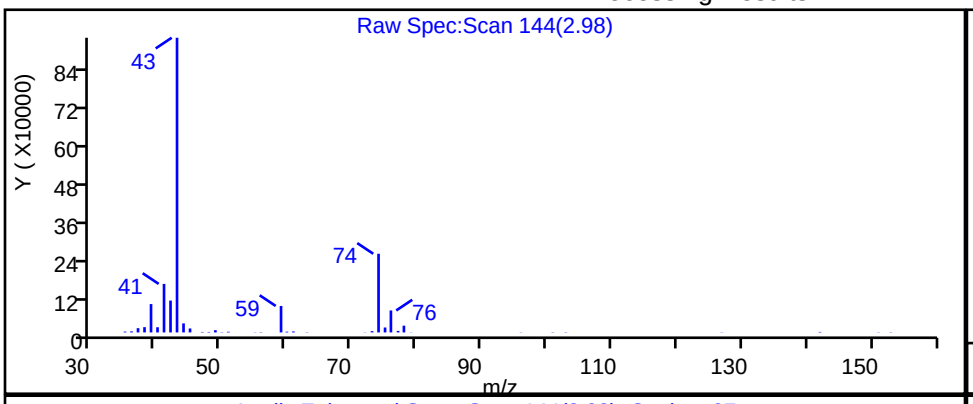
User Disabled Compound Report

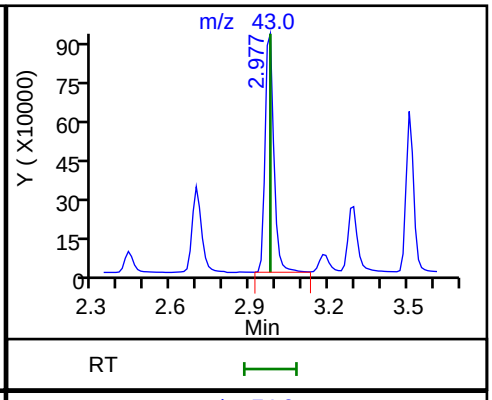
Eurofins TestAmerica, Canton

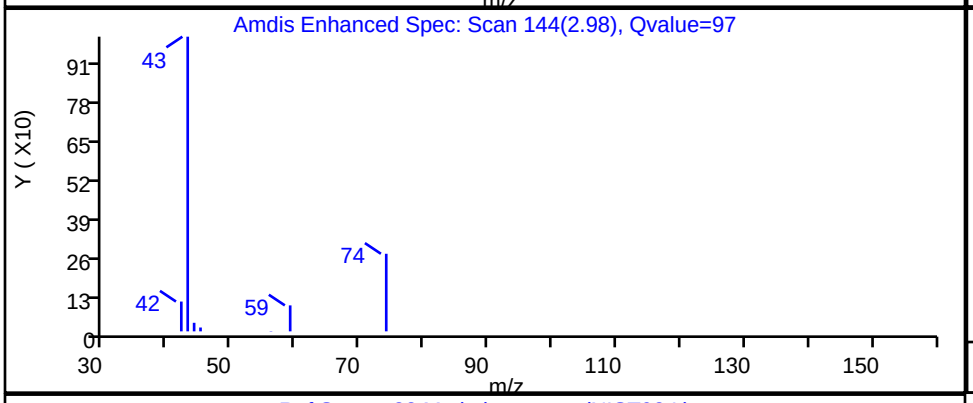
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

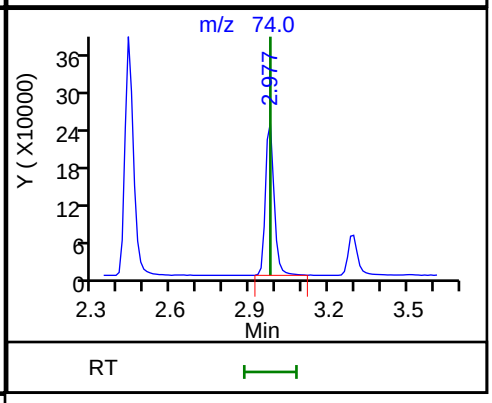
28 Methyl acetate, CAS: 79-20-9

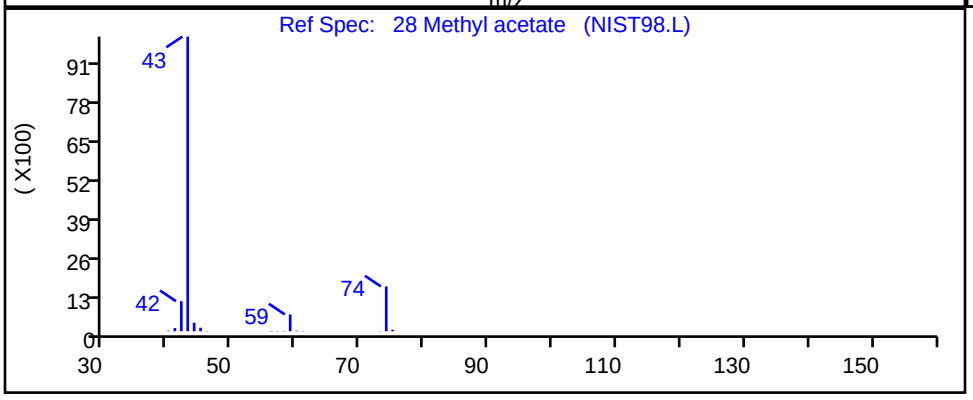
Processing Results











RT	Mass	Response	Amount
2.98	43.00	2177198	116.3615
2.98	74.00	577255	

Reviewer: laveyt, 30-Apr-2019 15:24:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

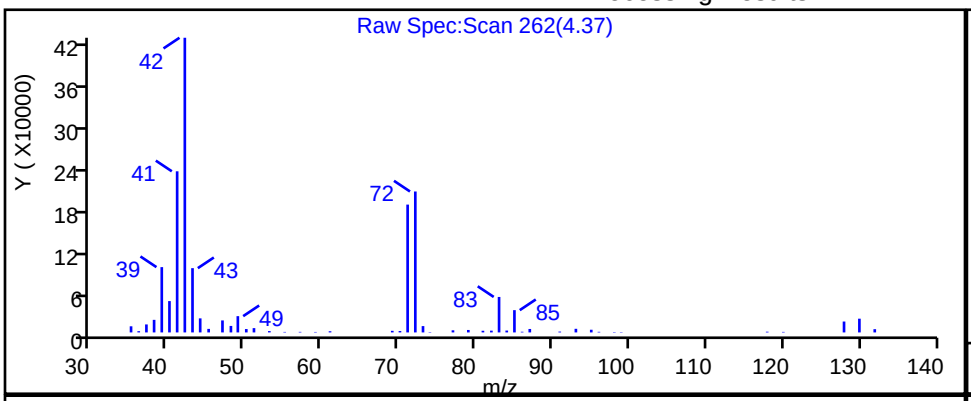
User Disabled Compound Report

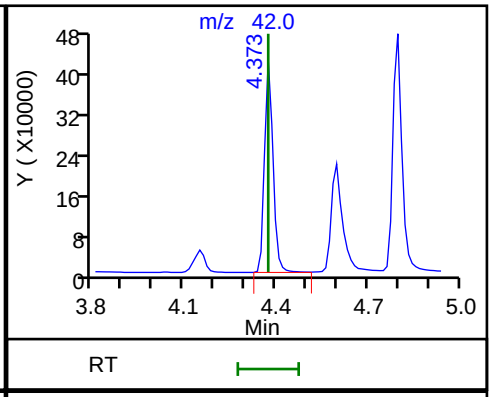
Eurofins TestAmerica, Canton

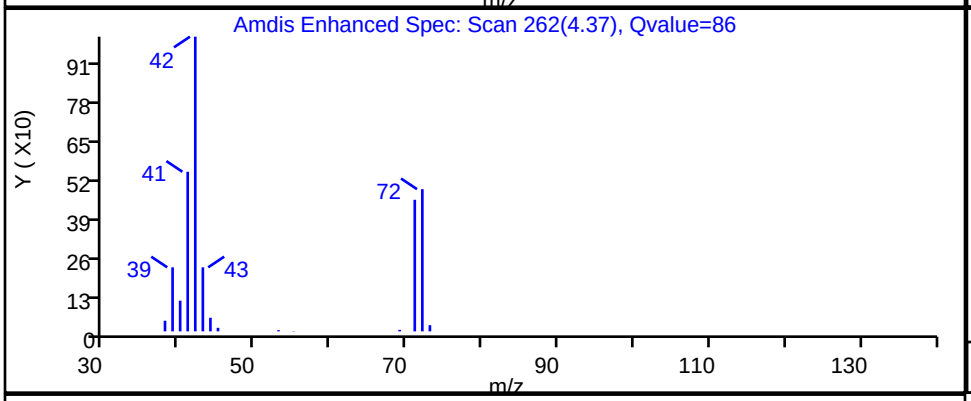
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

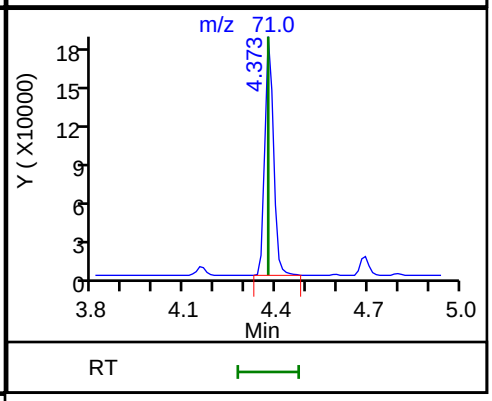
47 Tetrahydrofuran, CAS: 109-99-9

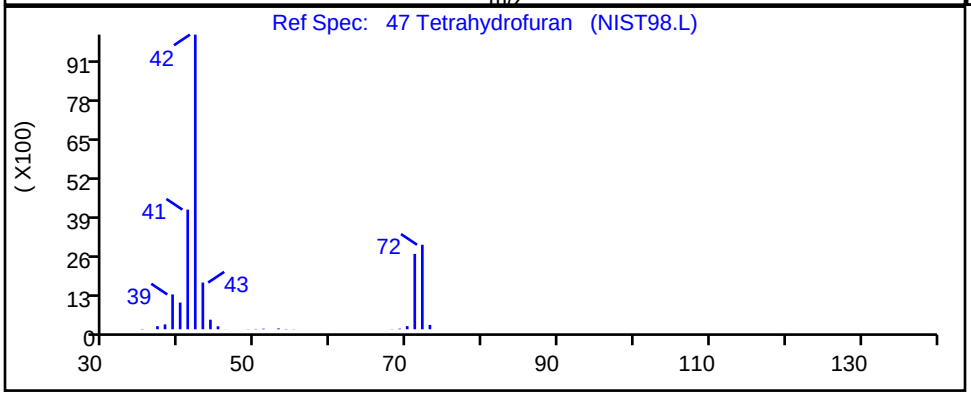
Processing Results











RT	Mass	Response	Amount
4.37	42.00	828689	103.3614
4.37	71.00	366944	

Reviewer: laveyt, 30-Apr-2019 15:25:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

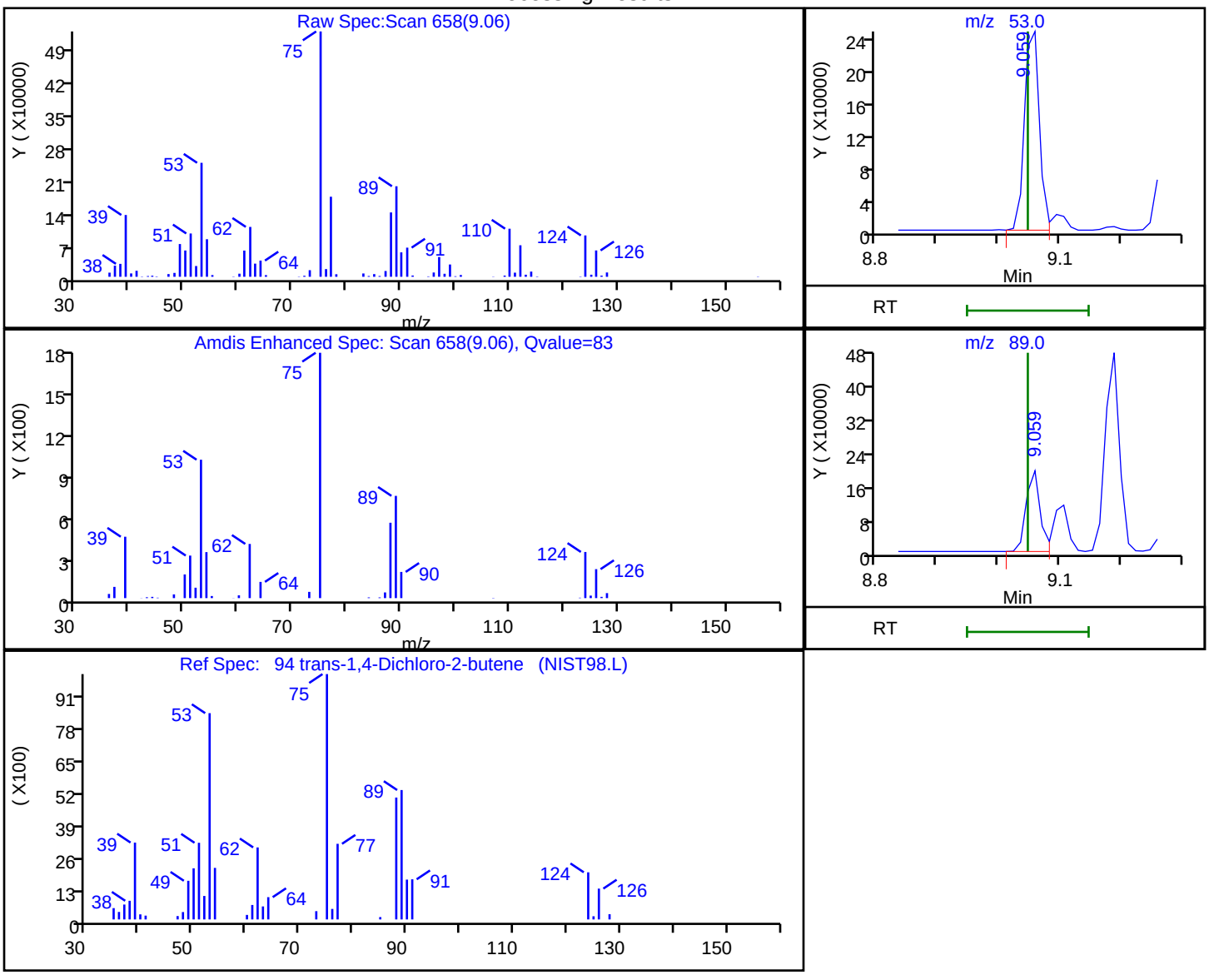
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D				
Injection Date:	30-Apr-2019 14:10:30	Instrument ID:	A3UX12		
Lims ID:	std8260 L7				
Client ID:					
Operator ID:	001904	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

94 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Processing Results



RT	Mass	Response	Amount
9.06	53.00	418490	63.161578
9.06	89.00	314865	

Reviewer: laveyt, 30-Apr-2019 15:28:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

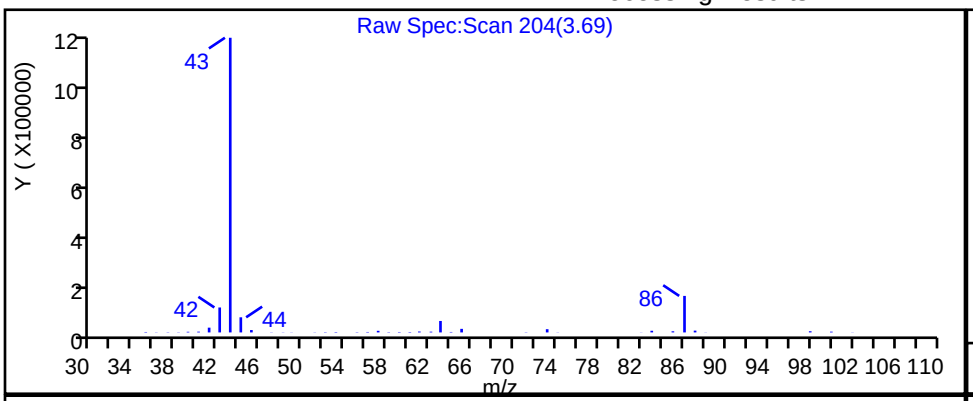
User Disabled Compound Report

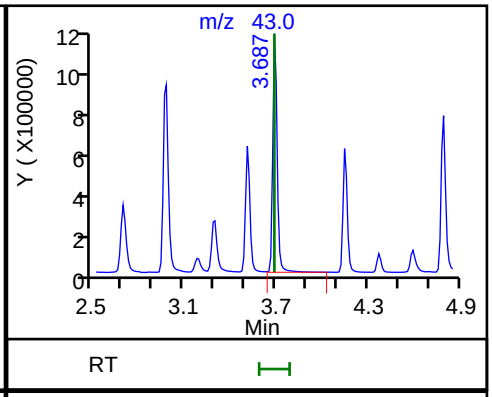
Eurofins TestAmerica, Canton

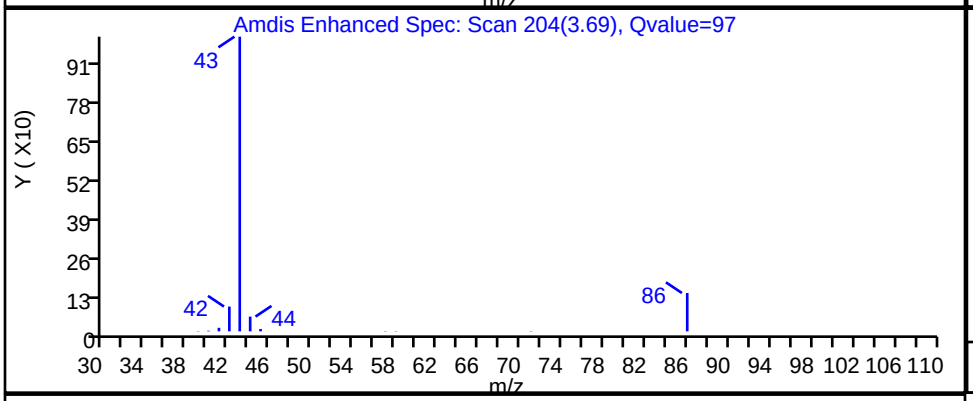
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

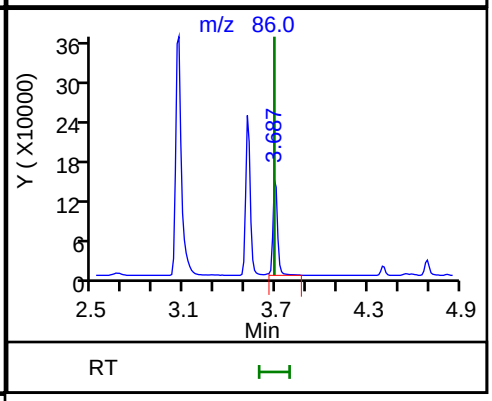
36 Vinyl acetate, CAS: 108-05-4

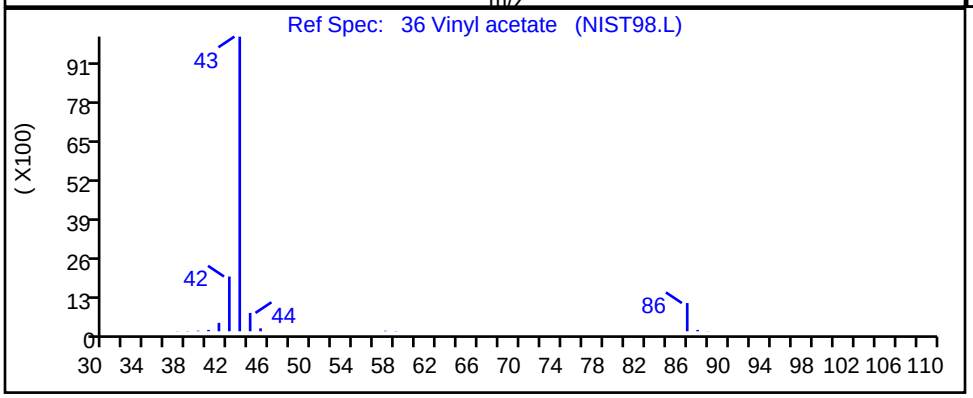
Processing Results











RT	Mass	Response	Amount
3.69	43.00	2383821	69.721119
3.69	86.00	313435	

Reviewer: laveyt, 30-Apr-2019 15:25:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269796.D
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Apr-2019 14:33:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-009
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:19 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 15:00:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1251919	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.757	7.758	-0.001	83	873681	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	92	477326	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	94	988457	60.0	59.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	99	1110364	60.0	59.4	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	3550979	60.0	57.4	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	94	1310206	60.0	57.5	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	100	1567191	60.0	65.0	
10 Chloromethane	50	1.581	1.581	0.000	98	1257715	60.0	59.5	
11 Butadiene	54	1.640	1.640	0.000	88	1449292	60.0	62.4	
12 Vinyl chloride	62	1.675	1.675	0.000	97	1455844	60.0	61.7	
14 Bromomethane	94	1.912	1.912	0.000	90	883232	60.0	60.6	
15 Chloroethane	64	1.983	1.995	-0.012	99	918797	60.0	62.0	
16 Dichlorofluoromethane	67	2.172	2.172	0.000	98	1807740	60.0	61.0	
17 Trichlorofluoromethane	101	2.220	2.220	0.000	99	1662729	60.0	63.2	
19 Ethyl ether	59	2.433	2.433	0.000	89	929149	60.0	58.8	
20 Acrolein	56	2.551	2.551	0.000	99	1380457	300.0	292.2	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	1522285	60.0	58.8	
22 1,1,2-Trichloro-1,2,2-trif	101	2.669	2.669	0.000	94	1054000	60.0	61.5	
23 Acetone	43	2.693	2.693	0.000	100	1067191	120.0	119.8	
24 Iodomethane	142	2.764	2.764	0.000	97	1619670	60.0	58.9	
25 Carbon disulfide	76	2.811	2.823	-0.012	99	3310792	60.0	55.6	
27 3-Chloro-1-propene	41	2.941	2.953	-0.012	93	1697487	60.0	57.5	
28 Methyl acetate	43	2.977	2.977	0.000	97	2530486	120.0	116.2	
29 Methylene Chloride	49	3.060	3.060	0.000	89	1311846	60.0	59.6	
30 2-Methyl-2-propanol	59	3.178	3.166	0.012	100	2552659	600.0	557.0	
31 Acrylonitrile	53	3.273	3.273	0.000	99	6486159	600.0	572.2	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	98	1450217	60.0	57.0	
33 Methyl tert-butyl ether	73	3.296	3.285	0.011	94	3027404	60.0	57.6	
34 Hexane	57	3.509	3.510	-0.001	89	1702774	60.0	61.3	
35 1,1-Dichloroethane	63	3.651	3.652	-0.001	96	1856520	60.0	58.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	2173371	60.0	61.0	
41 2,2-Dichloropropane	77	4.137	4.137	0.000	60	1156337	60.0	56.2	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	80	1255612	60.0	58.2	
42 2-Butanone (MEK)	72	4.148	4.149	-0.001	99	482200	120.0	123.6	
46 Chlorobromomethane	49	4.338	4.338	0.000	95	858112	60.0	56.8	
47 Tetrahydrofuran	42	4.373	4.373	0.000	86	1132369	120.0	120.6	
48 Chloroform	83	4.397	4.397	0.000	93	1766502	60.0	58.3	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	1574408	60.0	60.5	
50 Cyclohexane	84	4.598	4.598	0.000	87	1928649	60.0	61.0	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	96	1521069	60.0	59.1	
52 Carbon tetrachloride	117	4.693	4.693	0.000	79	1327796	60.0	60.0	
53 Isobutyl alcohol	41	4.799	4.788	0.011	94	1784970	1500.0	1434.1	
54 Benzene	78	4.870	4.870	0.000	95	4341955	60.0	58.9	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	1329568	60.0	58.6	
57 n-Heptane	57	5.071	5.071	0.000	93	841832	60.0	61.6	
59 Trichloroethene	130	5.403	5.403	0.000	97	1167306	60.0	59.2	
61 Methylcyclohexane	83	5.568	5.568	0.000	86	2177617	60.0	61.6	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	93	937223	60.0	60.2	
64 Dibromomethane	174	5.710	5.710	0.000	97	757811	60.0	57.4	
65 1,4-Dioxane	88	5.722	5.722	0.000	90	298901	1200.0	1193.3	
66 Dichlorobromomethane	83	5.829	5.829	0.000	100	1304681	60.0	61.4	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	1435551	120.0	127.0	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	96	1566673	60.0	60.5	
70 4-Methyl-2-pentanone (MIBK	43	6.349	6.349	0.000	95	2858560	120.0	119.1	
71 Toluene	91	6.515	6.515	0.000	99	4263658	60.0	58.3	
72 trans-1,3-Dichloropropene	75	6.704	6.704	0.000	92	1400355	60.0	59.2	
74 Ethyl methacrylate	69	6.775	6.775	0.000	89	1413898	60.0	62.0	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	91	861361	60.0	59.3	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	1157587	60.0	59.6	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	88	1521180	60.0	59.0	
78 2-Hexanone	43	7.095	7.095	0.000	93	2004012	120.0	114.7	
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	919717	60.0	60.9	
81 Ethylene Dibromide	107	7.331	7.332	-0.001	98	941630	60.0	60.3	
83 Chlorobenzene	112	7.781	7.781	0.000	95	2734043	60.0	57.9	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	987481	60.0	59.9	
85 Ethylbenzene	106	7.876	7.876	0.000	98	1545630	60.0	58.7	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	1937780	60.0	59.3	
87 o-Xylene	106	8.361	8.361	0.000	95	1931683	60.0	58.5	
88 Styrene	104	8.373	8.373	0.000	94	3161922	60.0	59.7	
89 Bromoform	173	8.550	8.550	0.000	98	697809	60.0	63.9	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	5047046	60.0	58.7	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	86	1444688	60.0	61.5	
93 Bromobenzene	156	9.000	9.000	0.000	89	1209647	60.0	58.5	
95 1,2,3-Trichloropropane	110	9.047	9.047	0.000	86	516092	60.0	58.0	
94 trans-1,4-Dichloro-2-buten	53	9.059	9.047	0.012	81	451551	60.0	59.3	
96 N-Propylbenzene	120	9.106	9.107	-0.001	98	1416141	60.0	60.2	
97 2-Chlorotoluene	126	9.189	9.189	0.000	97	1168744	60.0	59.3	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	4038075	60.0	59.5	
99 4-Chlorotoluene	126	9.296	9.296	0.000	99	1186575	60.0	58.3	
102 tert-Butylbenzene	119	9.592	9.592	0.000	91	3712091	60.0	60.2	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	4146548	60.0	59.0	
105 sec-Butylbenzene	105	9.805	9.805	0.000	93	5308368	60.0	59.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	2338079	60.0	57.4	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	4555449	60.0	59.4	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	2363448	60.0	56.4	
111 n-Butylbenzene	91	10.349	10.349	0.000	96	3900305	60.0	59.6	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	2247875	60.0	56.9	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	94	477069	60.0	62.2	
115 1,2,4-Trichlorobenzene	180	11.958	11.946	0.012	94	1562937	60.0	56.6	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	96	675267	60.0	55.4	
117 Naphthalene	128	12.195	12.195	0.000	97	5009873	60.0	57.9	
118 1,2,3-Trichlorobenzene	180	12.443	12.443	0.000	96	1426661	60.0	55.9	
S 124 Trihalomethanes, Total	1				0		240.0	244.5	
S 125 Total BTEX	1				0		300.0	293.7	
S 126 1,2-Dichloroethene, Total	96				0			115.3	
S 127 1,3-Dichloropropene, Total	75				0			119.7	
S 128 Xylenes, Total	106				0		120.0	117.8	

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	48.00	Units: uL
vm50ss_00362	Amount Added:	48.00	Units: uL
vmarolistdw_00294	Amount Added:	48.00	Units: uL
vmrprimw_00331	Amount Added:	48.00	Units: uL

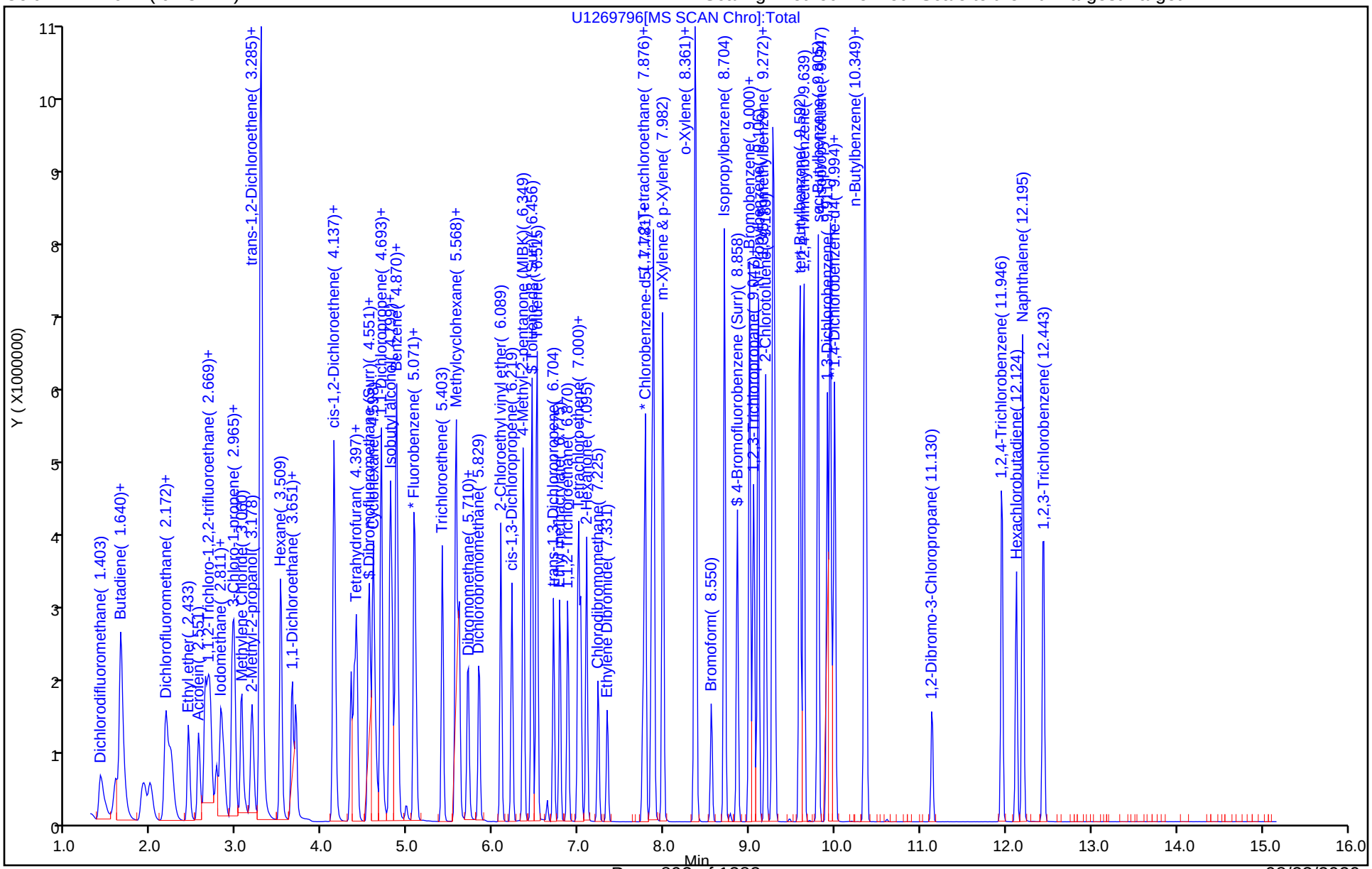
Report Date: 30-Apr-2019 17:22:24 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269796.D

Injection Date:	30-Apr-2019 14:33:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L6			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269797.D
Lims ID: std8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Apr-2019 14:55:30 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-010
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:36 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 15:22:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1247371	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	84	848037	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.001	93	466349	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	94	680998	40.0	41.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	98	754824	40.0	40.5	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	2403057	40.0	40.0	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	95	874019	40.0	39.5	
9 Dichlorodifluoromethane	85	1.404	1.403	0.001	99	1030351	40.0	42.9	
10 Chloromethane	50	1.581	1.581	0.000	99	863765	40.0	41.0	
11 Butadiene	54	1.640	1.640	0.000	87	960327	40.0	41.5	
12 Vinyl chloride	62	1.664	1.675	-0.011	98	970649	40.0	41.3	
14 Bromomethane	94	1.912	1.912	0.000	90	590824	40.0	40.7	
15 Chloroethane	64	1.983	1.995	-0.012	99	592754	40.0	40.1	
16 Dichlorofluoromethane	67	2.161	2.172	-0.011	97	1183160	40.0	40.1	
17 Trichlorofluoromethane	101	2.208	2.220	-0.012	98	1094737	40.0	41.8	
19 Ethyl ether	59	2.433	2.433	0.000	89	641131	40.0	40.7	
20 Acrolein	56	2.551	2.551	0.000	99	946268	200.0	201.0	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	1043595	40.0	40.5	
22 1,1,2-Trichloro-1,2,2-trif	101	2.658	2.669	-0.011	93	708990	40.0	41.5	
23 Acetone	43	2.693	2.693	0.000	100	729471	80.0	81.5	
24 Iodomethane	142	2.764	2.764	0.000	97	1115860	40.0	40.7	
25 Carbon disulfide	76	2.823	2.823	0.000	99	2267883	40.0	38.2	
27 3-Chloro-1-propene	41	2.942	2.953	-0.011	93	1176034	40.0	40.0	
28 Methyl acetate	43	2.977	2.977	0.000	97	1715851	80.0	79.1	
29 Methylene Chloride	49	3.060	3.060	0.000	90	930086	40.0	41.6	
30 2-Methyl-2-propanol	59	3.178	3.166	0.012	100	1790088	400.0	392.0	
31 Acrylonitrile	53	3.273	3.273	0.000	99	4436089	400.0	392.7	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	98	1013326	40.0	40.0	
33 Methyl tert-butyl ether	73	3.285	3.285	0.000	94	2131851	40.0	40.7	
34 Hexane	57	3.510	3.510	0.000	90	1142313	40.0	41.3	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	1284657	40.0	40.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	1462850	40.0	41.2	
41 2,2-Dichloropropane	77	4.137	4.137	0.000	61	841953	40.0	41.1	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	81	866934	40.0	40.4	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	322049	80.0	82.9	
46 Chlorobromomethane	49	4.338	4.338	0.000	95	598675	40.0	39.8	
47 Tetrahydrofuran	42	4.374	4.373	0.001	86	755334	80.0	80.7	
48 Chloroform	83	4.397	4.397	0.000	95	1231881	40.0	40.8	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	1083939	40.0	41.8	
50 Cyclohexane	84	4.598	4.598	0.000	87	1285622	40.0	40.8	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	95	1034085	40.0	40.4	
52 Carbon tetrachloride	117	4.693	4.693	0.000	82	940122	40.0	42.7	
53 Isobutyl alcohol	41	4.788	4.788	0.000	94	1254651	1000.0	1011.7	
54 Benzene	78	4.871	4.870	0.001	95	2963156	40.0	40.3	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	908435	40.0	40.2	
57 n-Heptane	57	5.072	5.071	0.001	94	571599	40.0	41.0	
59 Trichloroethene	130	5.403	5.403	0.000	96	793097	40.0	40.3	
61 Methylcyclohexane	83	5.569	5.568	0.001	86	1493017	40.0	42.4	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	94	643520	40.0	41.5	
64 Dibromomethane	174	5.711	5.710	0.001	96	529643	40.0	40.2	
65 1,4-Dioxane	88	5.723	5.722	0.001	90	212766	800.0	852.6	
66 Dichlorobromomethane	83	5.829	5.829	0.000	100	894000	40.0	42.2	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	945507	80.0	83.9	
69 cis-1,3-Dichloropropene	75	6.220	6.219	0.001	97	1063891	40.0	41.3	
70 4-Methyl-2-pentanone (MIBK	43	6.350	6.349	0.001	95	1951525	80.0	81.6	
71 Toluene	91	6.515	6.515	0.000	99	2883485	40.0	40.6	
72 trans-1,3-Dichloropropene	75	6.705	6.704	0.001	92	945703	40.0	41.2	
74 Ethyl methacrylate	69	6.776	6.775	0.001	89	952052	40.0	43.0	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	91	581540	40.0	41.2	
76 Tetrachloroethene	166	7.000	7.000	0.000	96	784044	40.0	41.6	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	88	1025142	40.0	41.0	
78 2-Hexanone	43	7.095	7.095	0.000	93	1354308	80.0	79.9	
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	633936	40.0	43.3	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	633639	40.0	41.8	
83 Chlorobenzene	112	7.781	7.781	0.000	96	1876430	40.0	41.0	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	674622	40.0	42.1	
85 Ethylbenzene	106	7.876	7.876	0.000	98	1066262	40.0	41.7	
86 m-Xylene & p-Xylene	106	7.983	7.982	0.001	99	1329053	40.0	41.9	
87 o-Xylene	106	8.361	8.361	0.000	96	1331003	40.0	41.5	
88 Styrene	104	8.373	8.373	0.000	95	2156541	40.0	41.9	
89 Bromoform	173	8.551	8.550	0.001	97	475190	40.0	44.8	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	3506656	40.0	42.0	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	86	982071	40.0	42.8	
93 Bromobenzene	156	9.000	9.000	0.000	88	818090	40.0	40.5	
95 1,2,3-Trichloropropane	110	9.048	9.047	0.001	84	356976	40.0	41.1	
94 trans-1,4-Dichloro-2-buten	53	9.048	9.047	0.001	91	305416	40.0	41.1	
96 N-Propylbenzene	120	9.107	9.107	0.000	98	966595	40.0	42.0	
97 2-Chlorotoluene	126	9.190	9.189	0.001	98	813877	40.0	42.2	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	2808258	40.0	42.4	
99 4-Chlorotoluene	126	9.296	9.296	0.000	97	815761	40.0	41.0	
102 tert-Butylbenzene	119	9.592	9.592	0.000	91	2579873	40.0	42.9	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	2883392	40.0	42.0	
105 sec-Butylbenzene	105	9.805	9.805	0.000	93	3709245	40.0	42.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	1612862	40.0	40.5	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	3212945	40.0	42.9	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	1641044	40.0	40.1	
111 n-Butylbenzene	91	10.349	10.349	0.000	96	2709817	40.0	42.4	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	99	1554362	40.0	40.3	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	92	325575	40.0	43.5	
115 1,2,4-Trichlorobenzene	180	11.947	11.946	0.001	94	1096024	40.0	40.7	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	469488	40.0	39.4	
117 Naphthalene	128	12.195	12.195	0.000	97	3569051	40.0	42.3	
118 1,2,3-Trichlorobenzene	180	12.444	12.443	0.001	96	1001370	40.0	40.1	
S 124 Trihalomethanes, Total	1				0		160.0	171.1	
S 125 Total BTEX	1				0		200.0	206.1	
S 126 1,2-Dichloroethene, Total	96				0			80.3	
S 127 1,3-Dichloropropene, Total	75				0			82.4	
S 128 Xylenes, Total	106				0		80.0	83.4	

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	32.00	Units: uL
vm50ss_00362	Amount Added:	32.00	Units: uL
vmarolistdw_00294	Amount Added:	32.00	Units: uL
vmrprimw_00331	Amount Added:	32.00	Units: uL

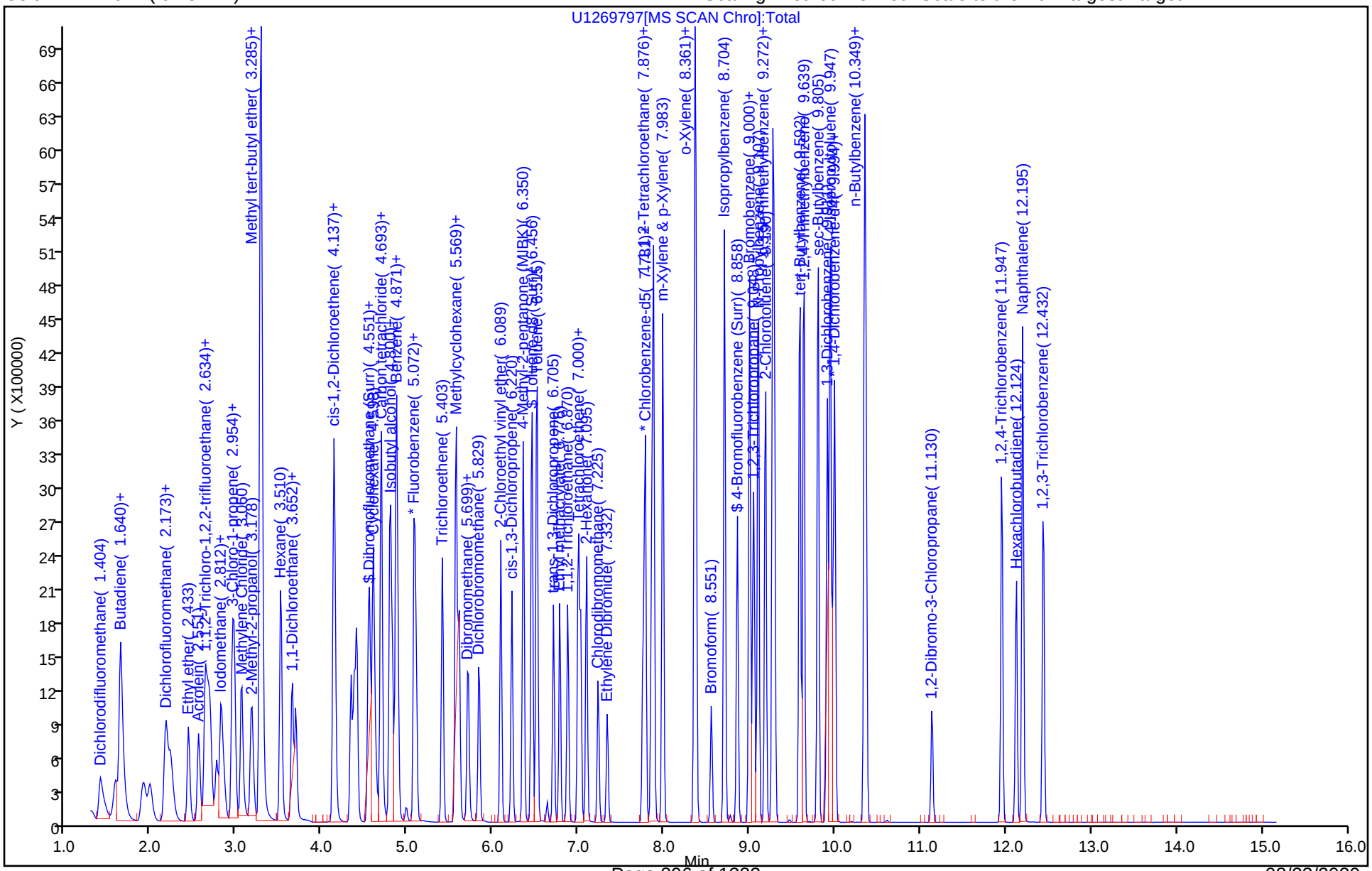
Report Date: 30-Apr-2019 17:22:42 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269797.D

Injection Date:	30-Apr-2019 14:55:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L5			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269798.D
Lims ID: ICIS L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 30-Apr-2019 15:17:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-011
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:54 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:03:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1246876	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	83	855324	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	94	464704	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	94	332600	20.0	20.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	96	366398	20.0	19.7	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	1181805	20.0	19.5	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	95	426237	20.0	19.1	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	496091	20.0	20.7	
10 Chloromethane	50	1.581	1.581	0.000	99	403612	20.0	19.2	
11 Butadiene	54	1.640	1.640	0.000	88	460371	20.0	19.9	
12 Vinyl chloride	62	1.675	1.675	0.000	97	463335	20.0	19.7	
14 Bromomethane	94	1.912	1.912	0.000	90	290732	20.0	20.0	
15 Chloroethane	64	1.995	1.995	0.000	99	292854	20.0	19.8	
16 Dichlorofluoromethane	67	2.172	2.172	0.000	97	575498	20.0	19.5	
17 Trichlorofluoromethane	101	2.220	2.220	0.000	99	524611	20.0	20.0	
19 Ethyl ether	59	2.433	2.433	0.000	89	308106	20.0	19.6	
20 Acrolein	56	2.551	2.551	0.000	99	454386	100.0	96.6	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	508373	20.0	19.7	
22 1,1,2-Trichloro-1,2,2-trif	101	2.669	2.669	0.000	94	345600	20.0	20.3	
23 Acetone	43	2.693	2.693	0.000	100	354093	40.0	38.4	
24 Iodomethane	142	2.764	2.764	0.000	97	538227	20.0	19.6	
25 Carbon disulfide	76	2.823	2.823	0.000	99	1117299	20.0	18.8	
27 3-Chloro-1-propene	41	2.953	2.953	0.000	92	560067	20.0	19.1	
28 Methyl acetate	43	2.977	2.977	0.000	97	825132	40.0	38.0	
29 Methylene Chloride	49	3.060	3.060	0.000	90	464186	20.0	19.4	
30 2-Methyl-2-propanol	59	3.166	3.166	0.000	100	872907	200.0	191.3	
31 Acrylonitrile	53	3.273	3.273	0.000	99	2135420	200.0	189.1	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	71	492658	20.0	19.4	
33 Methyl tert-butyl ether	73	3.285	3.285	0.000	94	1039087	20.0	19.8	
34 Hexane	57	3.510	3.510	0.000	90	557732	20.0	20.2	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	622049	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	700651	20.0	19.7	
41 2,2-Dichloropropane	77	4.137	4.137	0.000	61	412857	20.0	20.1	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	80	417933	20.0	19.5	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	151425	40.0	39.0	
46 Chlorobromomethane	49	4.338	4.338	0.000	94	288735	20.0	19.2	
47 Tetrahydrofuran	42	4.373	4.373	0.000	86	360495	40.0	38.5	
48 Chloroform	83	4.397	4.397	0.000	94	602114	20.0	19.9	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	533200	20.0	20.6	
50 Cyclohexane	84	4.598	4.598	0.000	87	642956	20.0	20.4	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	96	504905	20.0	19.7	
52 Carbon tetrachloride	117	4.693	4.693	0.000	81	453383	20.0	20.6	
53 Isobutyl alcohol	41	4.788	4.788	0.000	94	615511	500.0	496.5	
54 Benzene	78	4.870	4.870	0.000	95	1437120	20.0	19.6	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	441298	20.0	19.5	
57 n-Heptane	57	5.071	5.071	0.000	90	299975	20.0	20.1	
59 Trichloroethene	130	5.403	5.403	0.000	96	387176	20.0	19.7	
61 Methylcyclohexane	83	5.568	5.568	0.000	85	720921	20.0	20.5	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	93	307704	20.0	19.8	
64 Dibromomethane	174	5.710	5.710	0.000	97	249664	20.0	19.0	
65 1,4-Dioxane	88	5.722	5.722	0.000	90	110260	400.0	442.0	
66 Dichlorobromomethane	83	5.829	5.829	0.000	100	425494	20.0	20.1	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	453314	40.0	40.3	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	97	507172	20.0	19.7	
70 4-Methyl-2-pentanone (MIBK	43	6.349	6.349	0.000	95	939875	40.0	39.3	
71 Toluene	91	6.515	6.515	0.000	99	1384009	20.0	19.3	
72 trans-1,3-Dichloropropene	75	6.704	6.704	0.000	92	450107	20.0	19.4	
74 Ethyl methacrylate	69	6.775	6.775	0.000	89	458650	20.0	20.5	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	90	277803	20.0	19.5	
76 Tetrachloroethene	166	7.000	7.000	0.000	96	377626	20.0	19.8	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	88	490824	20.0	19.5	
78 2-Hexanone	43	7.095	7.095	0.000	93	674546	40.0	39.4	
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	298689	20.0	20.2	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	304693	20.0	19.9	
83 Chlorobenzene	112	7.781	7.781	0.000	96	892667	20.0	19.3	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	316979	20.0	19.6	
85 Ethylbenzene	106	7.876	7.876	0.000	98	512928	20.0	19.9	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	646378	20.0	20.2	
87 o-Xylene	106	8.361	8.361	0.000	95	648657	20.0	20.1	
88 Styrene	104	8.373	8.373	0.000	95	1042824	20.0	20.1	
89 Bromoform	173	8.550	8.550	0.000	97	228364	20.0	21.4	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	1698359	20.0	20.2	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	86	473524	20.0	20.7	
93 Bromobenzene	156	9.000	9.000	0.000	87	400745	20.0	19.9	
95 1,2,3-Trichloropropane	110	9.047	9.047	0.000	84	173052	20.0	20.0	
94 trans-1,4-Dichloro-2-buten	53	9.047	9.047	0.000	93	148061	20.0	20.0	
96 N-Propylbenzene	120	9.107	9.107	0.000	98	470058	20.0	20.5	
97 2-Chlorotoluene	126	9.189	9.189	0.000	97	385627	20.0	20.1	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	1351432	20.0	20.5	
99 4-Chlorotoluene	126	9.296	9.296	0.000	97	390042	20.0	19.7	
102 tert-Butylbenzene	119	9.592	9.592	0.000	91	1219799	20.0	20.3	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	1387358	20.0	20.3	
105 sec-Butylbenzene	105	9.805	9.805	0.000	93	1774243	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	777449	20.0	19.6	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	1531521	20.0	20.5	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	792152	20.0	19.4	
111 n-Butylbenzene	91	10.349	10.349	0.000	97	1300578	20.0	20.4	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	99	748334	20.0	19.5	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	90	148124	20.0	19.8	
115 1,2,4-Trichlorobenzene	180	11.946	11.946	0.000	94	494279	20.0	18.4	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	224541	20.0	18.9	
117 Naphthalene	128	12.195	12.195	0.000	97	1637491	20.0	19.5	
118 1,2,3-Trichlorobenzene	180	12.443	12.443	0.000	96	456339	20.0	18.4	
S 124 Trihalomethanes, Total	1				0		80.0	81.6	
S 125 Total BTEX	1				0		100.0	99.1	
S 128 Xylenes, Total	106				0		40.0	40.3	

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	16.00	Units: uL
vm50ss_00362	Amount Added:	16.00	Units: uL
vmarolistdw_00294	Amount Added:	16.00	Units: uL
vmrprimw_00331	Amount Added:	16.00	Units: uL

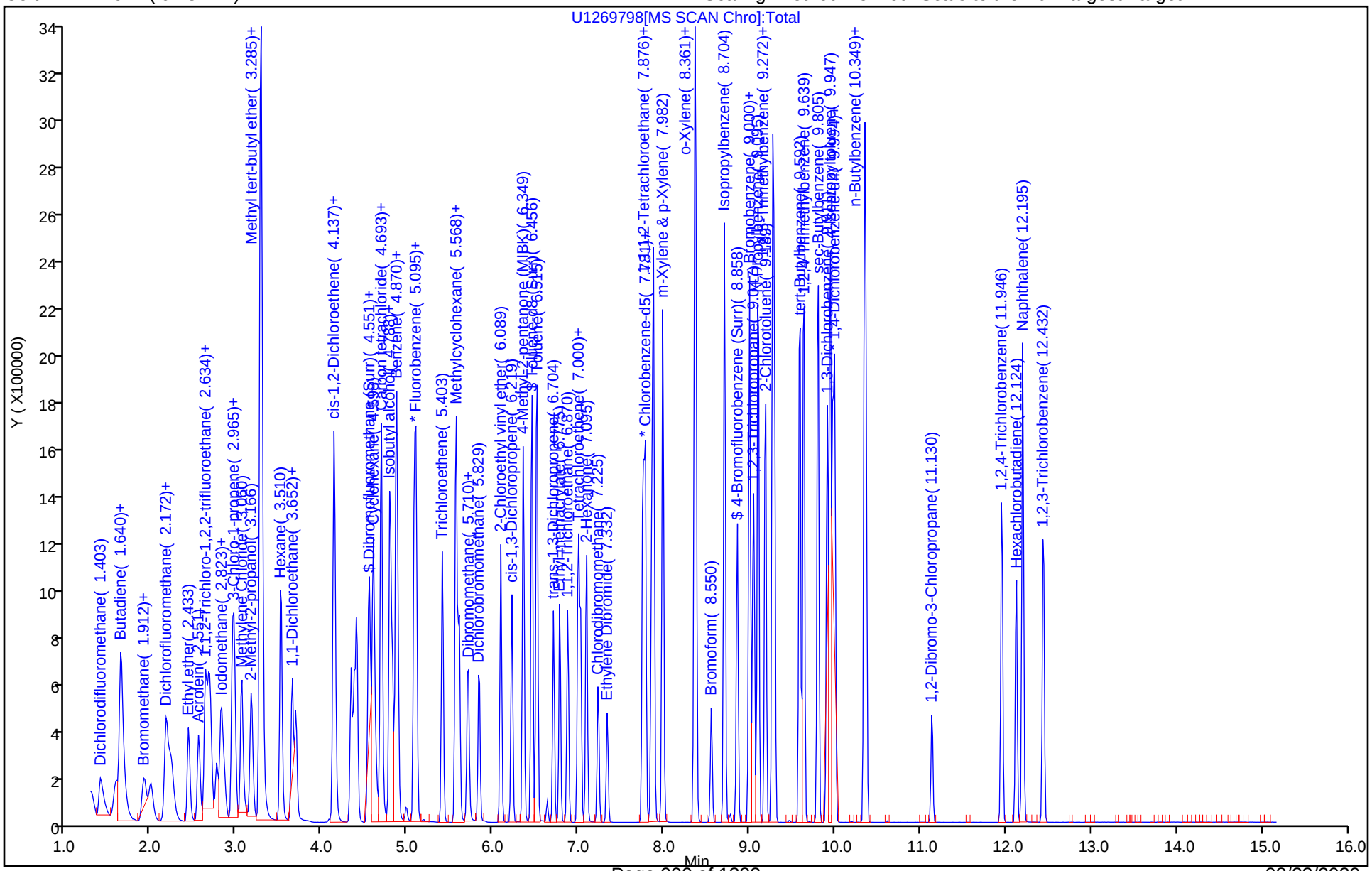
Report Date: 30-Apr-2019 17:22:59 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269798.D

Injection Date:	30-Apr-2019 15:17:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	ICIS L4			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269799.D
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Apr-2019 15:39:30 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-012
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:23:11 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:01:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1239226	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.757	7.758	-0.001	85	833142	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	93	455662	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	94	158064	10.0	9.59	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	96	176503	10.0	9.53	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	580962	10.0	9.84	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	93	211821	10.0	9.74	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	100	224597	10.0	9.41	
10 Chloromethane	50	1.581	1.581	0.000	98	214265	10.0	10.2	
11 Butadiene	54	1.640	1.640	0.000	86	222795	10.0	9.70	
12 Vinyl chloride	62	1.675	1.675	0.000	97	233314	10.0	9.99	
14 Bromomethane	94	1.912	1.912	0.000	90	151619	10.0	10.5	
15 Chloroethane	64	1.995	1.995	0.000	99	148379	10.0	10.1	
16 Dichlorofluoromethane	67	2.172	2.172	0.000	97	299518	10.0	10.2	
17 Trichlorofluoromethane	101	2.220	2.220	0.000	98	261265	10.0	10.0	
19 Ethyl ether	59	2.433	2.433	0.000	89	157567	10.0	10.1	
20 Acrolein	56	2.551	2.551	0.000	100	239777	50.0	51.3	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	98	255094	10.0	9.96	
22 1,1,2-Trichloro-1,2,2-trif	101	2.669	2.669	0.000	93	171045	10.0	10.1	
23 Acetone	43	2.693	2.693	0.000	100	195589	20.0	20.4	
24 Iodomethane	142	2.764	2.764	0.000	97	265387	10.0	9.75	
25 Carbon disulfide	76	2.823	2.823	0.000	99	563594	10.0	9.56	
27 3-Chloro-1-propene	41	2.953	2.953	0.000	93	284969	10.0	9.76	
28 Methyl acetate	43	2.977	2.977	0.000	97	426943	20.0	19.8	
29 Methylene Chloride	49	3.060	3.060	0.000	91	262888	10.0	9.85	
30 2-Methyl-2-propanol	59	3.166	3.166	0.000	100	452013	100.0	99.6	
31 Acrylonitrile	53	3.273	3.273	0.000	99	1113771	100.0	99.3	
32 trans-1,2-Dichloroethene	61	3.284	3.285	-0.001	69	248232	10.0	9.86	
33 Methyl tert-butyl ether	73	3.296	3.285	0.011	94	533312	10.0	10.2	
34 Hexane	57	3.521	3.510	0.011	89	279012	10.0	10.2	
35 1,1-Dichloroethane	63	3.651	3.652	-0.001	95	315456	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	346293	10.0	9.81	
41 2,2-Dichloropropane	77	4.136	4.137	-0.001	61	202782	10.0	9.95	
40 cis-1,2-Dichloroethene	96	4.136	4.137	-0.001	80	211496	10.0	9.91	
42 2-Butanone (MEK)	72	4.148	4.149	-0.001	98	78345	20.0	20.3	
46 Chlorobromomethane	49	4.338	4.338	0.000	94	146065	10.0	9.77	
47 Tetrahydrofuran	42	4.373	4.373	0.000	86	185955	20.0	20.0	
48 Chloroform	83	4.409	4.397	0.012	93	299618	10.0	9.98	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	258363	10.0	10.0	
50 Cyclohexane	84	4.598	4.598	0.000	87	324586	10.0	10.4	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	96	255221	10.0	10.0	
52 Carbon tetrachloride	117	4.693	4.693	0.000	80	212237	10.0	9.69	
53 Isobutyl alcohol	41	4.787	4.788	-0.001	95	312412	250.0	253.6	
54 Benzene	78	4.870	4.870	0.000	95	727951	10.0	9.98	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	214099	10.0	9.53	
57 n-Heptane	57	5.071	5.071	0.000	89	171315	10.0	10.3	
59 Trichloroethene	130	5.403	5.403	0.000	97	187506	10.0	9.60	
61 Methylcyclohexane	83	5.568	5.568	0.000	86	361953	10.0	10.3	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	94	154817	10.0	10.0	
64 Dibromomethane	174	5.710	5.710	0.000	93	122075	10.0	9.34	
65 1,4-Dioxane	88	5.722	5.722	0.000	89	58179	200.0	234.7	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	208118	10.0	9.89	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	230721	20.0	20.6	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	97	248543	10.0	9.70	
70 4-Methyl-2-pentanone (MIBK	43	6.349	6.349	0.000	95	479830	20.0	20.2	
71 Toluene	91	6.515	6.515	0.000	99	693965	10.0	9.95	
72 trans-1,3-Dichloropropene	75	6.704	6.704	0.000	92	219235	10.0	9.71	
74 Ethyl methacrylate	69	6.775	6.775	0.000	88	229870	10.0	10.6	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	89	138863	10.0	10.0	
76 Tetrachloroethene	166	7.000	7.000	0.000	96	186459	10.0	10.1	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	88	244890	10.0	9.97	
78 2-Hexanone	43	7.095	7.095	0.000	93	347483	20.0	20.9	
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	141322	10.0	9.82	
81 Ethylene Dibromide	107	7.331	7.332	-0.001	99	146267	10.0	9.81	
83 Chlorobenzene	112	7.781	7.781	0.000	96	442384	10.0	9.83	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	154999	10.0	9.86	
85 Ethylbenzene	106	7.876	7.876	0.000	98	254036	10.0	10.1	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	314453	10.0	10.1	
87 o-Xylene	106	8.361	8.361	0.000	95	311889	10.0	9.90	
88 Styrene	104	8.373	8.373	0.000	94	501125	10.0	9.92	
89 Bromoform	173	8.550	8.550	0.000	97	103500	10.0	9.94	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	836910	10.0	10.2	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	86	237420	10.0	10.6	
93 Bromobenzene	156	9.000	9.000	0.000	89	192642	10.0	9.76	
95 1,2,3-Trichloropropane	110	9.047	9.047	0.000	84	84888	10.0	10.0	
94 trans-1,4-Dichloro-2-buten	53	9.047	9.047	0.000	80	71337	10.0	9.82	
96 N-Propylbenzene	120	9.106	9.107	-0.001	99	227545	10.0	10.1	
97 2-Chlorotoluene	126	9.189	9.189	0.000	97	187392	10.0	9.95	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	660502	10.0	10.2	
99 4-Chlorotoluene	126	9.296	9.296	0.000	99	190484	10.0	9.80	
102 tert-Butylbenzene	119	9.591	9.592	-0.001	91	597272	10.0	10.2	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	681127	10.0	10.2	
105 sec-Butylbenzene	105	9.804	9.805	-0.001	93	878572	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	376754	10.0	9.69	
107 4-Isopropyltoluene	119	9.946	9.947	-0.001	97	745472	10.0	10.2	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	379011	10.0	9.47	
111 n-Butylbenzene	91	10.349	10.349	0.000	96	629870	10.0	10.1	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	99	360738	10.0	9.57	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	89	71305	10.0	9.74	
115 1,2,4-Trichlorobenzene	180	11.958	11.946	0.012	94	233740	10.0	8.87	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	96	102755	10.0	8.83	
117 Naphthalene	128	12.195	12.195	0.000	97	784648	10.0	9.51	
118 1,2,3-Trichlorobenzene	180	12.443	12.443	0.000	96	212164	10.0	8.70	
S 124 Trihalomethanes, Total	1				0		40.0	39.6	
S 125 Total BTEX	1				0		50.0	50.0	
S 126 1,2-Dichloroethene, Total	96				0			19.8	
S 127 1,3-Dichloropropene, Total	75				0			19.4	
S 128 Xylenes, Total	106				0		20.0	20.0	

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	8.00	Units: uL
vm50ss_00362	Amount Added:	8.00	Units: uL
vmarolistdw_00294	Amount Added:	8.00	Units: uL
vmrprimw_00331	Amount Added:	8.00	Units: uL

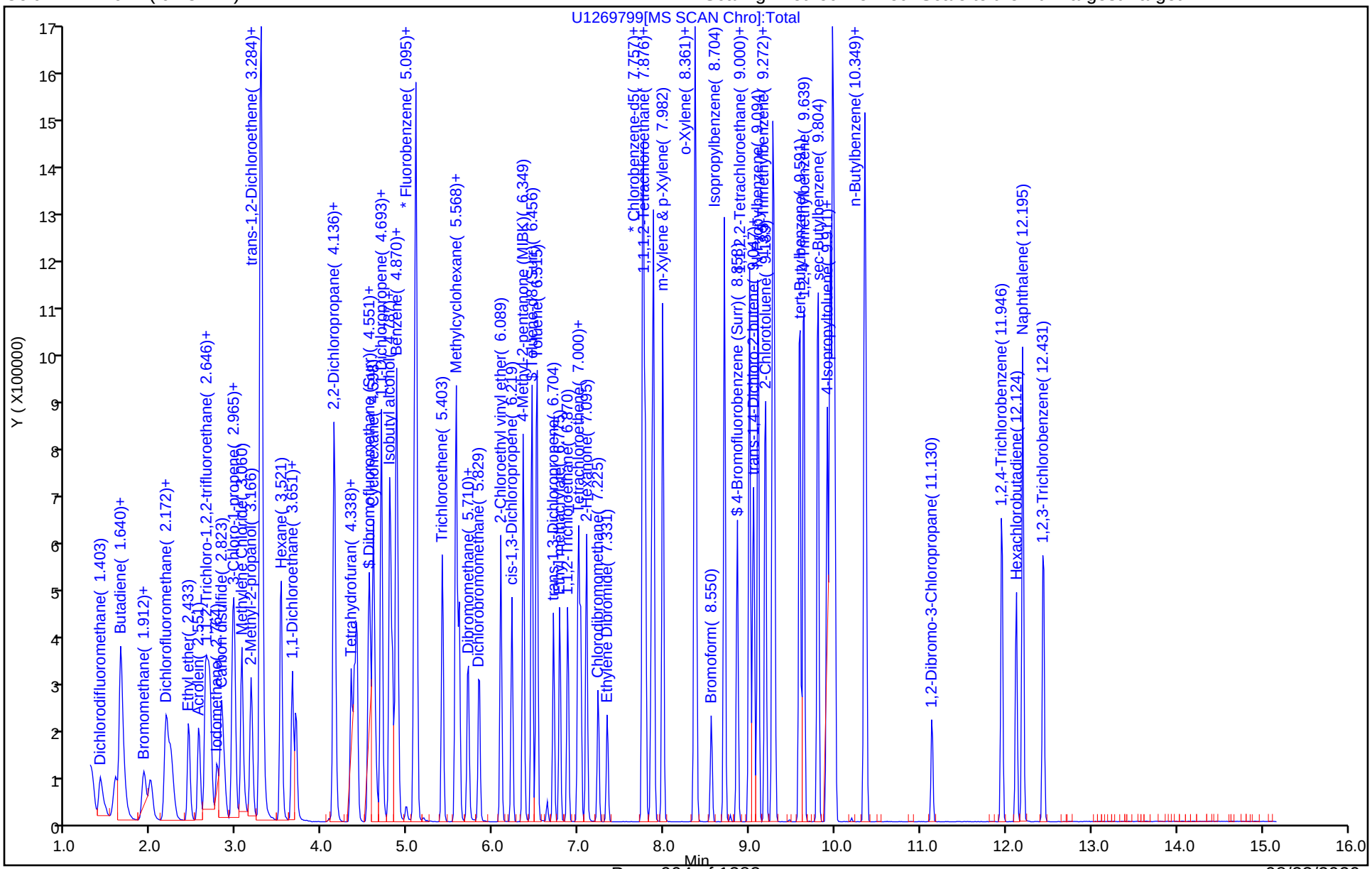
Report Date: 30-Apr-2019 17:23:17 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269799.D

Injection Date:	30-Apr-2019 15:39:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L3			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269800.D
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Apr-2019 16:02:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-013
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:23:30 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:24:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1208766	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	84	823058	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.001	94	473669	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	93	16968	1.00	1.06	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	96	20365	1.00	1.13	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	66709	1.00	1.14	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	93	25525	1.00	1.19	
9 Dichlorodifluoromethane	85	1.404	1.403	0.001	95	19984	1.00	0.8588	
10 Chloromethane	50	1.581	1.581	0.000	96	19082	1.00	0.9357	M
11 Butadiene	54	1.640	1.640	0.000	86	21365	1.00	0.9532	
12 Vinyl chloride	62	1.676	1.675	0.001	95	22643	1.00	0.99	
14 Bromomethane	94	1.912	1.912	0.000	87	15275	1.00	1.09	
15 Chloroethane	64	1.995	1.995	0.000	98	14836	1.00	1.04	
16 Dichlorofluoromethane	67	2.173	2.172	0.001	95	29001	1.00	1.01	
17 Trichlorofluoromethane	101	2.220	2.220	0.000	96	23742	1.00	0.9345	
19 Ethyl ether	59	2.433	2.433	0.000	88	15857	1.00	1.04	
20 Acrolein	56	2.563	2.551	0.012	99	22786	5.00	4.99	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	25123	1.00	1.01	
22 1,1,2-Trichloro-1,2,2-trif	101	2.670	2.669	0.001	89	15799	1.00	0.9553	
23 Acetone	43	2.693	2.693	0.000	99	35750	2.00	2.01	
24 Iodomethane	142	2.764	2.764	0.000	98	27241	1.00	1.03	
25 Carbon disulfide	76	2.823	2.823	0.000	99	63418	1.00	1.10	
27 3-Chloro-1-propene	41	2.954	2.953	0.001	91	29262	1.00	1.03	
28 Methyl acetate	43	2.977	2.977	0.000	96	43336	2.00	2.06	
29 Methylene Chloride	49	3.060	3.060	0.000	90	76885	1.00	1.02	
30 2-Methyl-2-propanol	59	3.167	3.166	0.001	99	46009	10.0	10.4	
31 Acrylonitrile	53	3.273	3.273	0.000	100	114297	10.0	10.4	
32 trans-1,2-Dichloroethene	61	3.297	3.285	0.012	68	26151	1.00	1.06	
33 Methyl tert-butyl ether	73	3.297	3.285	0.012	93	53530	1.00	1.05	
34 Hexane	57	3.522	3.510	0.012	90	25038	1.00	0.9341	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	95	31501	1.00	1.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.699	3.687	0.012	97	34619	1.00	1.01	
41 2,2-Dichloropropane	77	4.137	4.137	0.000	58	19842	1.00	1.00	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	80	22054	1.00	1.06	
42 2-Butanone (MEK)	72	4.161	4.149	0.012	99	7212	2.00	1.92	
46 Chlorobromomethane	49	4.338	4.338	0.000	92	15161	1.00	1.04	
47 Tetrahydrofuran	42	4.374	4.373	0.001	85	17279	2.00	1.91	
48 Chloroform	83	4.409	4.397	0.012	93	29434	1.00	1.01	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	24264	1.00	0.9658	
50 Cyclohexane	84	4.598	4.598	0.000	87	29359	1.00	0.9622	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	96	24613	1.00	0.99	
52 Carbon tetrachloride	117	4.693	4.693	0.000	78	20029	1.00	0.9377	
53 Isobutyl alcohol	41	4.788	4.788	0.000	93	28500	25.0	23.7	
54 Benzene	78	4.871	4.870	0.001	95	72564	1.00	1.02	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	23529	1.00	1.07	
57 n-Heptane	57	5.095	5.071	0.024	87	49490	1.00	0.9500	
59 Trichloroethene	130	5.403	5.403	0.000	94	19135	1.00	1.00	
61 Methylcyclohexane	83	5.569	5.568	0.001	83	31043	1.00	0.9100	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	92	14544	1.00	0.9671	
64 Dibromomethane	174	5.711	5.710	0.001	91	13696	1.00	1.07	
65 1,4-Dioxane	88	5.723	5.722	0.001	27	4063	20.0	16.8	
66 Dichlorobromomethane	83	5.829	5.829	0.000	97	19488	1.00	0.9496	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	91	21468	2.00	1.97	
69 cis-1,3-Dichloropropene	75	6.220	6.219	0.001	95	24819	1.00	0.99	
70 4-Methyl-2-pentanone (MIBK	43	6.350	6.349	0.001	95	46025	2.00	1.99	
71 Toluene	91	6.515	6.515	0.000	99	69512	1.00	1.01	
72 trans-1,3-Dichloropropene	75	6.705	6.704	0.001	91	23230	1.00	1.04	
74 Ethyl methacrylate	69	6.776	6.775	0.001	87	20354	1.00	0.9475	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	91	13079	1.00	0.9554	
76 Tetrachloroethene	166	7.001	7.000	0.000	96	17463	1.00	0.9539	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	90	24096	1.00	0.99	
78 2-Hexanone	43	7.095	7.095	0.000	92	32274	2.00	1.96	
80 Chlorodibromomethane	129	7.225	7.225	0.000	87	13420	1.00	0.9440	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	15068	1.00	1.02	
83 Chlorobenzene	112	7.781	7.781	0.000	95	44396	1.00	1.00	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	93	14884	1.00	0.9579	
85 Ethylbenzene	106	7.876	7.876	0.000	98	24504	1.00	0.9876	
86 m-Xylene & p-Xylene	106	7.983	7.982	0.001	100	30946	1.00	1.01	
87 o-Xylene	106	8.361	8.361	0.000	96	31499	1.00	1.01	
88 Styrene	104	8.373	8.373	0.000	94	46924	1.00	0.9403	
89 Bromoform	173	8.551	8.550	0.001	99	9669	1.00	0.9402	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	78943	1.00	0.9744	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	83	23506	1.00	1.01	
93 Bromobenzene	156	9.000	9.000	0.000	88	20743	1.00	1.01	
95 1,2,3-Trichloropropane	110	9.036	9.047	-0.011	85	9133	1.00	1.04	
94 trans-1,4-Dichloro-2-buten	53	9.048	9.047	0.001	80	7300	1.00	0.9665	
96 N-Propylbenzene	120	9.107	9.107	0.000	98	21478	1.00	0.9194	
97 2-Chlorotoluene	126	9.190	9.189	0.001	97	18750	1.00	0.9582	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	94	62930	1.00	0.9349	
99 4-Chlorotoluene	126	9.296	9.296	0.000	96	20976	1.00	1.04	
102 tert-Butylbenzene	119	9.592	9.592	0.000	91	55395	1.00	0.9059	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	65676	1.00	0.9421	
105 sec-Butylbenzene	105	9.805	9.805	0.000	93	81663	1.00	0.9278	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	97	41679	1.00	1.03	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	72056	1.00	0.9466	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	43811	1.00	1.05	
111 n-Butylbenzene	91	10.349	10.349	0.000	97	62232	1.00	0.9586	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	39597	1.00	1.01	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	85	6783	1.00	0.8913	
115 1,2,4-Trichlorobenzene	180	11.947	11.946	0.001	94	29197	1.00	1.07	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	93	14773	1.00	1.22	
117 Naphthalene	128	12.195	12.195	0.000	96	92597	1.00	1.08	
118 1,2,3-Trichlorobenzene	180	12.444	12.443	0.001	95	27351	1.00	1.08	
S 124 Trihalomethanes, Total	1				0		4.00	3.84	
S 125 Total BTEX	1				0		5.00	5.03	
S 126 1,2-Dichloroethene, Total	96				0			2.12	
S 127 1,3-Dichloropropene, Total	75				0			2.04	
S 128 Xylenes, Total	106				0		2.00	2.02	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	0.80	Units: uL
vm50ss_00362	Amount Added:	0.80	Units: uL
vmarolistdw_00294	Amount Added:	0.80	Units: uL
vmrprimw_00331	Amount Added:	0.80	Units: uL

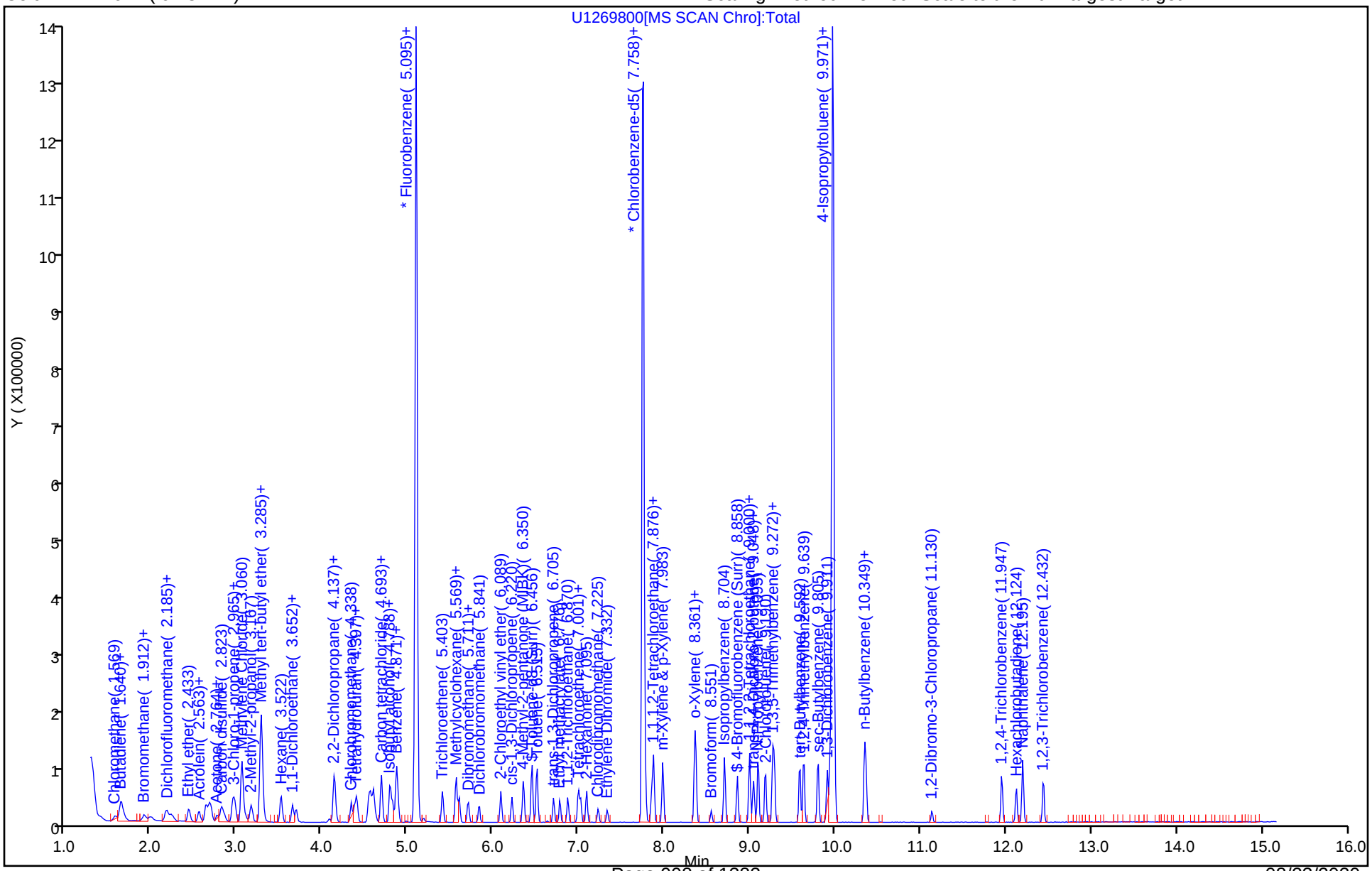
Report Date: 30-Apr-2019 17:23:35 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269800.D

Injection Date:	30-Apr-2019 16:02:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L2			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

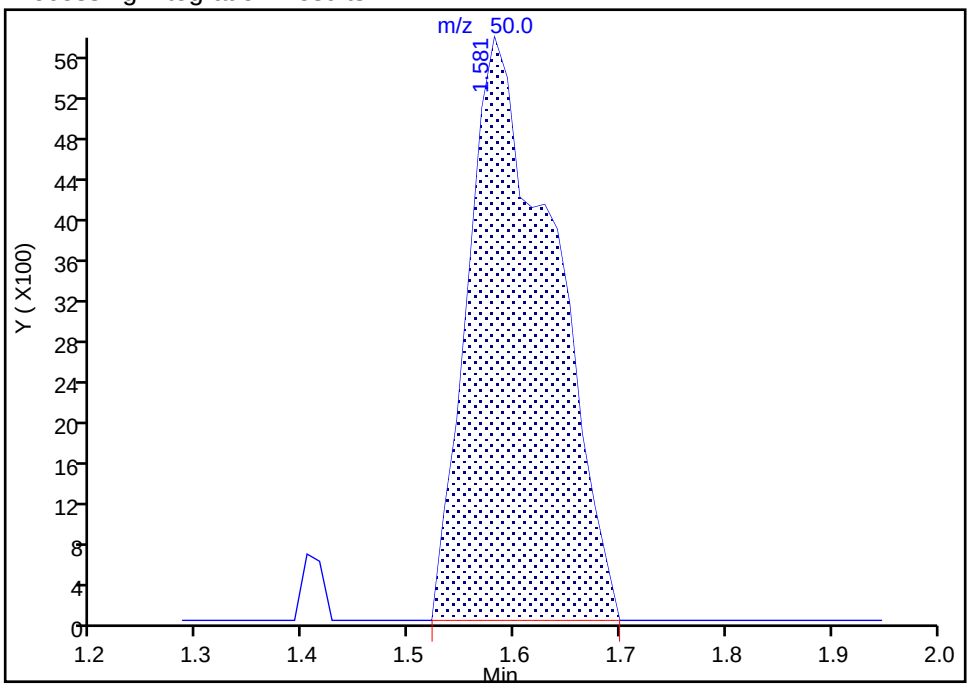
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269800.D
Injection Date: 30-Apr-2019 16:02:30 Instrument ID: A3UX12
Lims ID: std8260 L2
Client ID:
Operator ID: 001904 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

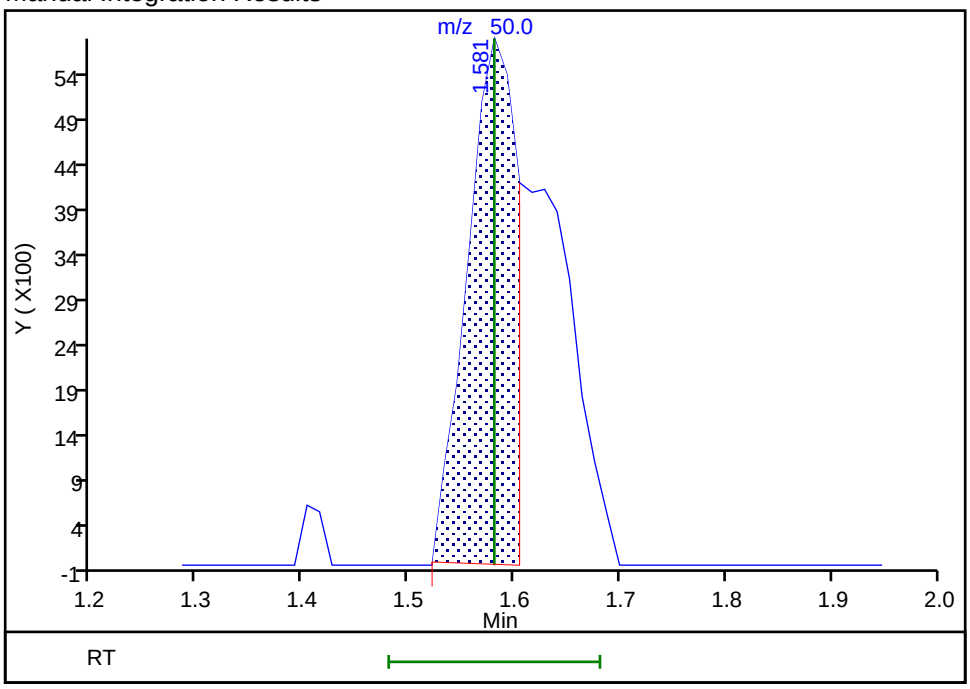
Processing Integration Results

RT: 1.58
Area: 32521
Amount: 1.095929
Amount Units: ug/l



Manual Integration Results

RT: 1.58
Area: 19082
Amount: 0.935716
Amount Units: ug/l



Reviewer: laveyt, 30-Apr-2019 16:22:33
Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Apr-2019 16:24:30 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-014
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:23:43 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:52:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1216002	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	85	815231	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	464788	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111		4.539				ND	ND	U
$ 5 1,2-Dichloroethane-d4 (Sur	65		4.823				ND	ND	U
$ 6 Toluene-d8 (Surr)	98		6.456				ND	ND	U
$ 7 4-Bromofluorobenzene (Surr	95		8.858				ND	ND	U
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	95	11044	0.5000	0.4718	
10 Chloromethane	50		1.581				ND	ND	U
11 Butadiene	54	1.640	1.640	0.000	84	11073	0.5000	0.4911	
12 Vinyl chloride	62	1.676	1.675	0.001	95	10733	0.5000	0.4681	
14 Bromomethane	94	1.924	1.912	0.012	81	7170	0.5000	0.5066	
15 Chloroethane	64	1.983	1.995	-0.012	93	7695	0.5000	0.5344	
16 Dichlorofluoromethane	67	2.173	2.172	0.001	95	14396	0.5000	0.5004	
17 Trichlorofluoromethane	101	2.220	2.220	0.000	94	12502	0.5000	0.4891	
19 Ethyl ether	59	2.433	2.433	0.000	92	8163	0.5000	0.5316	
20 Acrolein	56	2.551	2.551	0.000	96	11833	2.50	2.58	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	94	13081	0.5000	0.5204	
22 1,1,2-Trichloro-1,2,2-trif	101	2.670	2.669	0.001	55	7988	0.5000	0.4801	
23 Acetone	43		2.693				ND	ND	U
24 Iodomethane	142	2.776	2.764	0.012	93	14045	0.5000	0.5256	
25 Carbon disulfide	76	2.835	2.823	0.012	99	35208	0.5000	0.6085	
27 3-Chloro-1-propene	41	2.954	2.953	0.001	92	16129	0.5000	0.5628	
28 Methyl acetate	43	2.977	2.977	0.000	96	22700	1.00	1.07	
29 Methylene Chloride	49		3.060				ND	ND	U
30 2-Methyl-2-propanol	59	3.167	3.166	0.001	99	24459	5.00	5.49	
31 Acrylonitrile	53	3.285	3.273	0.012	99	59579	5.00	5.41	
32 trans-1,2-Dichloroethene	61	3.297	3.285	0.012	73	13341	0.5000	0.5401	
33 Methyl tert-butyl ether	73	3.297	3.285	0.012	93	26396	0.5000	0.5170	
34 Hexane	57	3.522	3.510	0.012	90	13878	0.5000	0.5147	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	95	15738	0.5000	0.5109	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	96	16963	0.5000	0.4899	
41 2,2-Dichloropropane	77	4.137	4.137	0.000	56	10546	0.5000	0.5275	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	79	10822	0.5000	0.5168	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	3739	1.00	0.9870	
46 Chlorobromomethane	49	4.338	4.338	0.000	91	8465	0.5000	0.5769	
47 Tetrahydrofuran	42	4.373	4.373	0.000	86	9753	1.00	1.07	
48 Chloroform	83	4.409	4.397	0.012	92	15213	0.5000	0.5165	
49 1,1,1-Trichloroethane	97	4.563	4.551	0.012	95	11924	0.5000	0.4718	
50 Cyclohexane	84	4.598	4.598	0.000	86	15299	0.5000	0.4984	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	94	13318	0.5000	0.5331	
52 Carbon tetrachloride	117	4.693	4.693	0.000	78	10783	0.5000	0.5018	
53 Isobutyl alcohol	41	4.788	4.788	0.000	93	16262	12.5	13.5	
54 Benzene	78	4.870	4.870	0.000	94	37546	0.5000	0.5243	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	96	11902	0.5000	0.5400	
57 n-Heptane	57		5.071				ND	ND	U
59 Trichloroethene	130	5.403	5.403	0.000	90	10516	0.5000	0.5487	
61 Methylcyclohexane	83	5.569	5.568	0.001	82	17502	0.5000	0.5100	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	93	7613	0.5000	0.5032	
64 Dibromomethane	174	5.711	5.710	0.001	87	7633	0.5000	0.5950	
65 1,4-Dioxane	88	5.722	5.722	0.000	27	2151	10.0	8.84	
66 Dichlorobromomethane	83	5.841	5.829	0.012	95	10242	0.5000	0.4961	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	91	11398	1.00	1.04	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	13273	0.5000	0.5281	
70 4-Methyl-2-pentanone (MIBK	43	6.350	6.349	0.001	93	23343	1.00	1.00	
71 Toluene	91	6.515	6.515	0.000	98	36733	0.5000	0.5384	
72 trans-1,3-Dichloropropene	75	6.705	6.704	0.001	91	11758	0.5000	0.5324	
74 Ethyl methacrylate	69	6.776	6.775	0.001	85	10652	0.5000	0.5006	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	83	7700	0.5000	0.5679	
76 Tetrachloroethene	166	7.000	7.000	0.000	94	9314	0.5000	0.5137	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	87	13441	0.5000	0.5591	
78 2-Hexanone	43	7.095	7.095	0.000	94	16906	1.00	1.04	
80 Chlorodibromomethane	129	7.225	7.225	0.000	86	7003	0.5000	0.4973	
81 Ethylene Dibromide	107	7.332	7.332	0.000	96	7750	0.5000	0.5314	
83 Chlorobenzene	112	7.781	7.781	0.000	97	24288	0.5000	0.5516	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	93	7683	0.5000	0.4992	
85 Ethylbenzene	106	7.876	7.876	0.000	98	12234	0.5000	0.4978	
86 m-Xylene & p-Xylene	106	7.983	7.982	0.001	98	14577	0.5000	0.4781	
87 o-Xylene	106	8.361	8.361	0.000	95	15474	0.5000	0.5021	
88 Styrene	104	8.373	8.373	0.000	94	25585	0.5000	0.5176	
89 Bromoform	173	8.551	8.550	0.000	92	4510	0.5000	0.4427	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	39682	0.5000	0.4945	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	10861	0.5000	0.4748	
93 Bromobenzene	156	9.000	9.000	0.000	88	10562	0.5000	0.5244	
95 1,2,3-Trichloropropane	110	9.047	9.047	0.000	84	4202	0.5000	0.4853	
94 trans-1,4-Dichloro-2-buten	53	9.059	9.047	0.012	70	3843	0.5000	0.5185	
96 N-Propylbenzene	120	9.107	9.107	0.000	98	11209	0.5000	0.4890	
97 2-Chlorotoluene	126	9.189	9.189	0.000	96	9330	0.5000	0.4859	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	95	31487	0.5000	0.4767	
99 4-Chlorotoluene	126	9.296	9.296	0.000	97	10044	0.5000	0.5068	
102 tert-Butylbenzene	119	9.592	9.592	0.000	90	28862	0.5000	0.4810	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	95	33748	0.5000	0.4934	
105 sec-Butylbenzene	105	9.805	9.805	0.000	93	40589	0.5000	0.4699	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	96	21531	0.5000	0.5427	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	96	34741	0.5000	0.4651	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	23084	0.5000	0.5657	
111 n-Butylbenzene	91	10.349	10.349	0.000	95	29814	0.5000	0.4680	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	97	21676	0.5000	0.5636	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	84	3806	0.5000	0.5097	
115 1,2,4-Trichlorobenzene	180	11.958	11.946	0.012	91	15055	0.5000	0.5604	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	92	6234	0.5000	0.5255	
117 Naphthalene	128	12.195	12.195	0.000	96	45140	0.5000	0.5362	
118 1,2,3-Trichlorobenzene	180	12.444	12.443	0.001	94	14329	0.5000	0.5762	
S 124 Trihalomethanes, Total	1				0		2.00	1.95	
S 125 Total BTEX	1				0		2.50	2.54	
S 126 1,2-Dichloroethene, Total	96				0			1.06	
S 127 1,3-Dichloropropene, Total	75				0			1.06	
S 128 Xylenes, Total	106				0		1.00	0.9802	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmrgas_00291	Amount Added:	0.40	Units: uL
vm50ss_00362	Amount Added:	0.40	Units: uL
vmarolistdw_00294	Amount Added:	0.40	Units: uL
vmrprimw_00331	Amount Added:	0.40	Units: uL

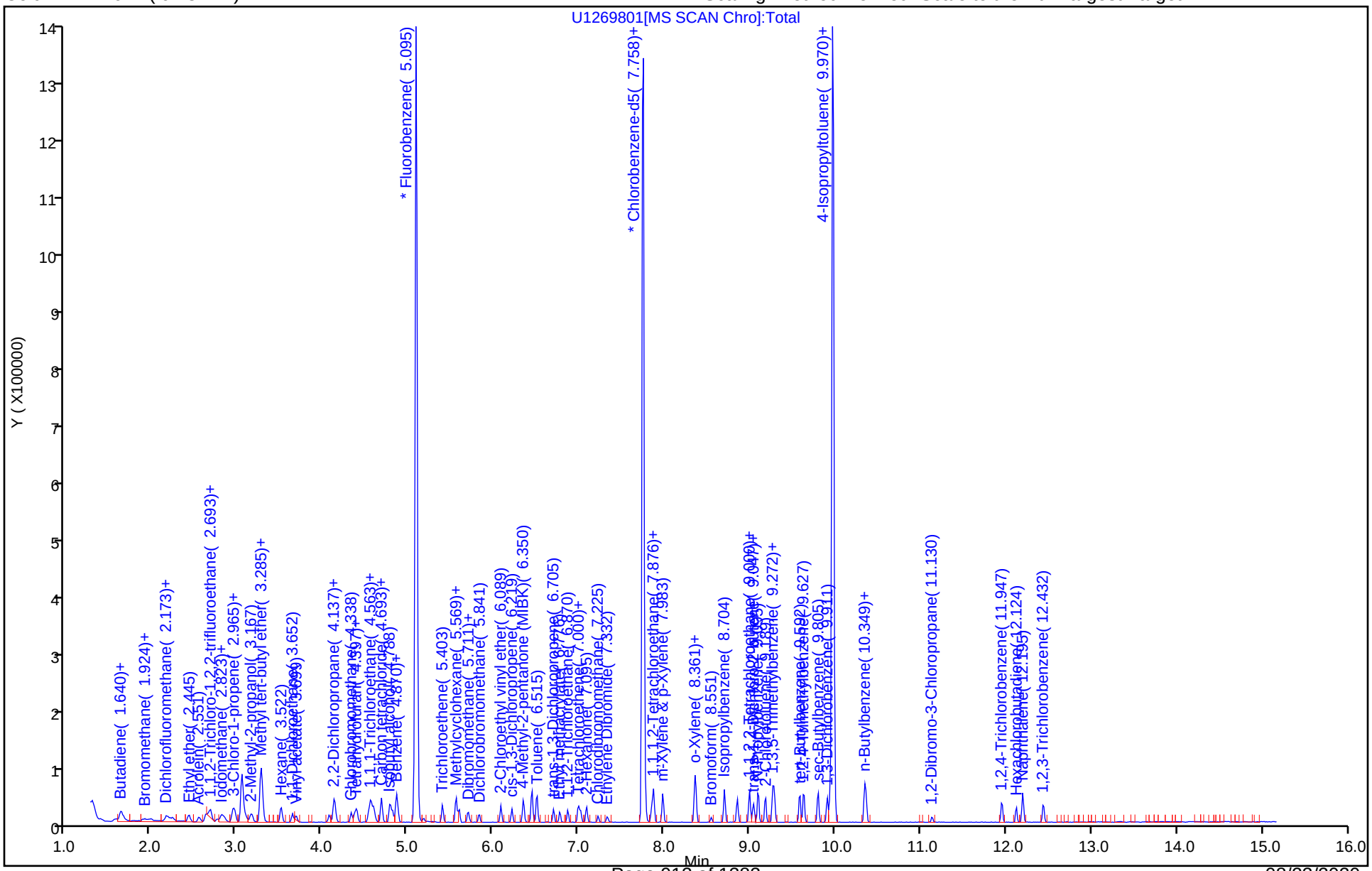
Report Date: 30-Apr-2019 17:23:46 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Injection Date:	30-Apr-2019 16:24:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L1			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



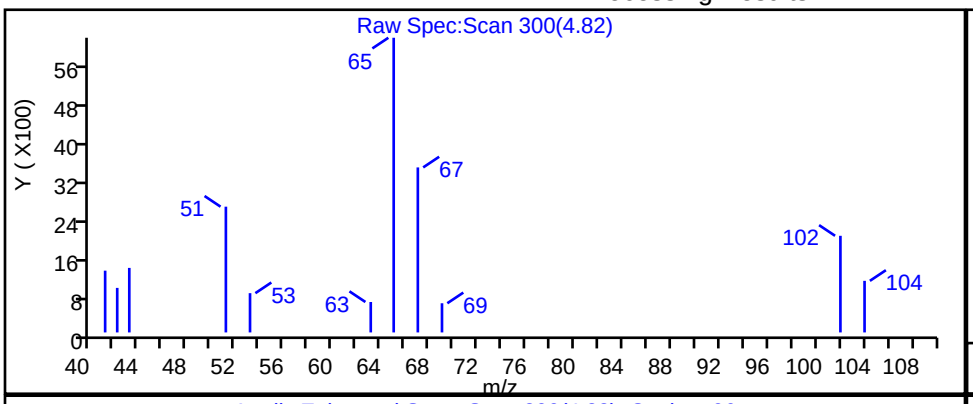
User Disabled Compound Report

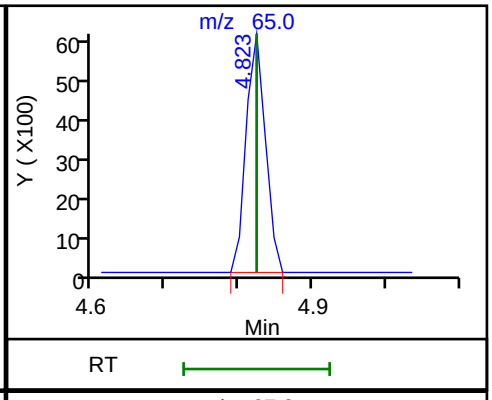
Eurofins TestAmerica, Canton

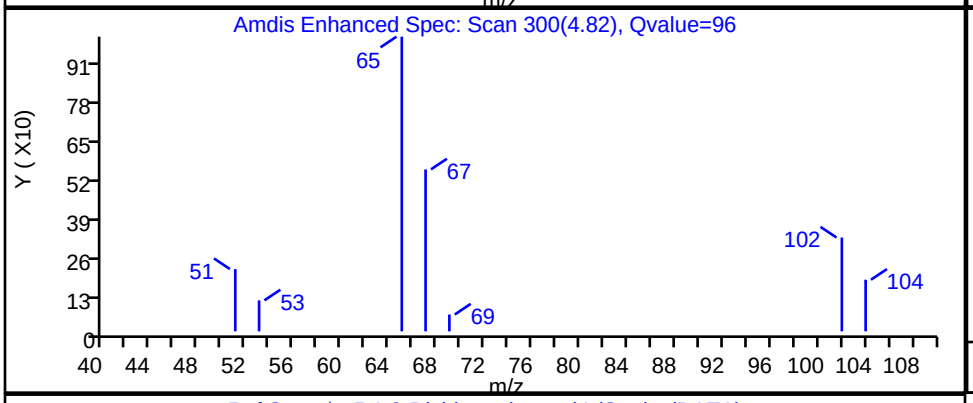
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

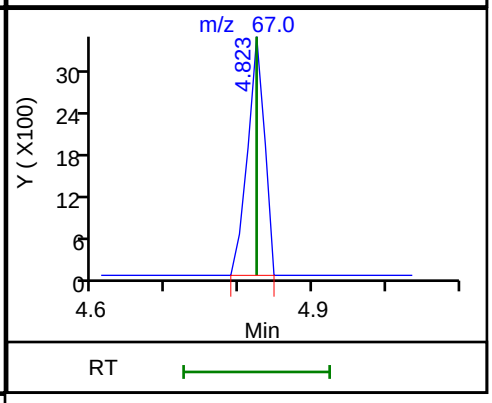
$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

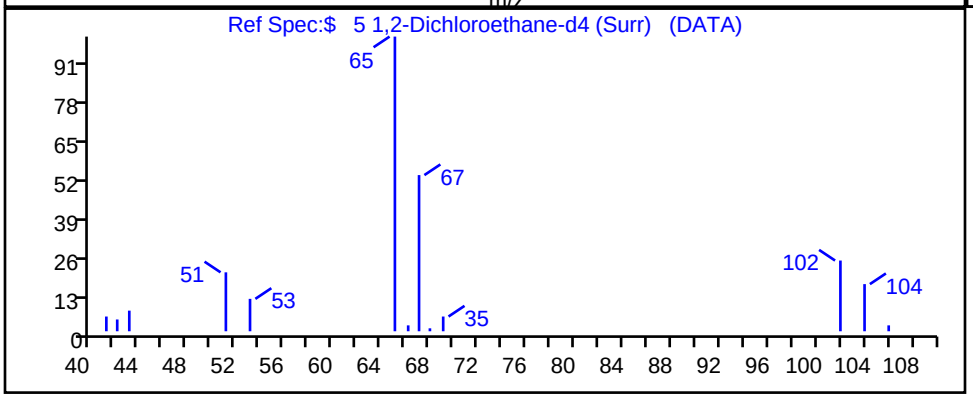
Processing Results











RT	Mass	Response	Amount
4.82	65.00	11177	0.595662
4.82	67.00	5473	

Reviewer: laveyt, 30-Apr-2019 16:51:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

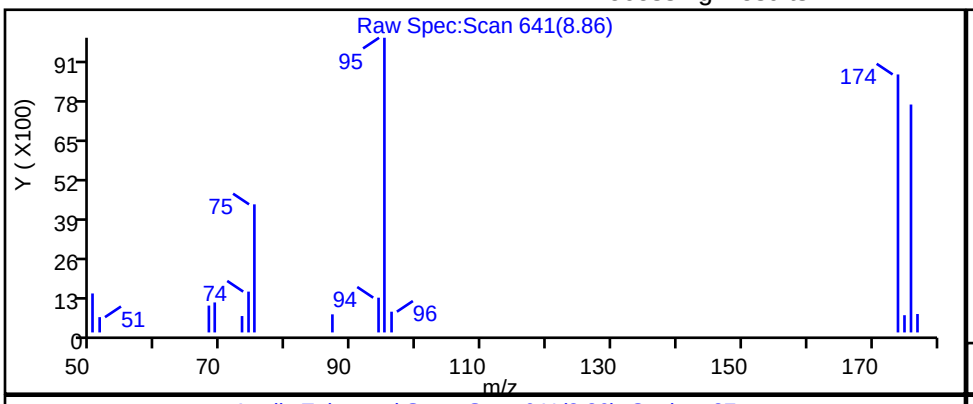
User Disabled Compound Report

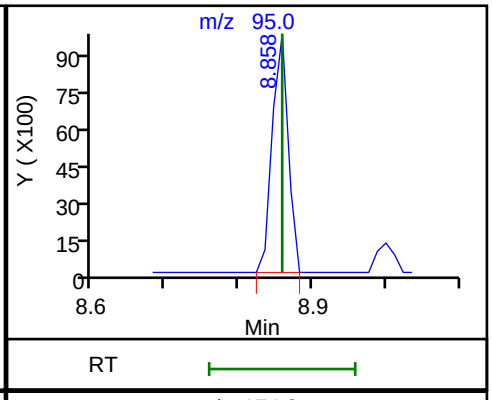
Eurofins TestAmerica, Canton

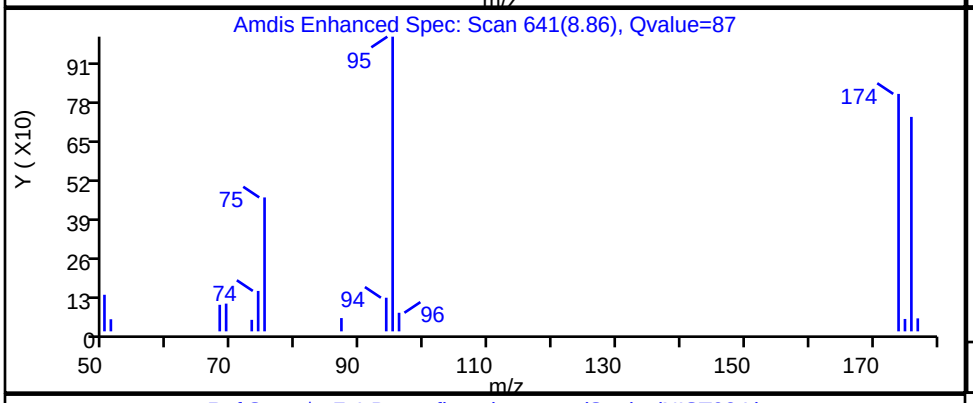
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

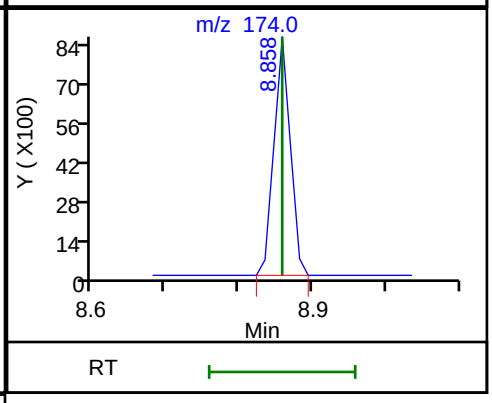
$ 7 4-Bromofluorobenzene (Surr), CAS: 460-00-4

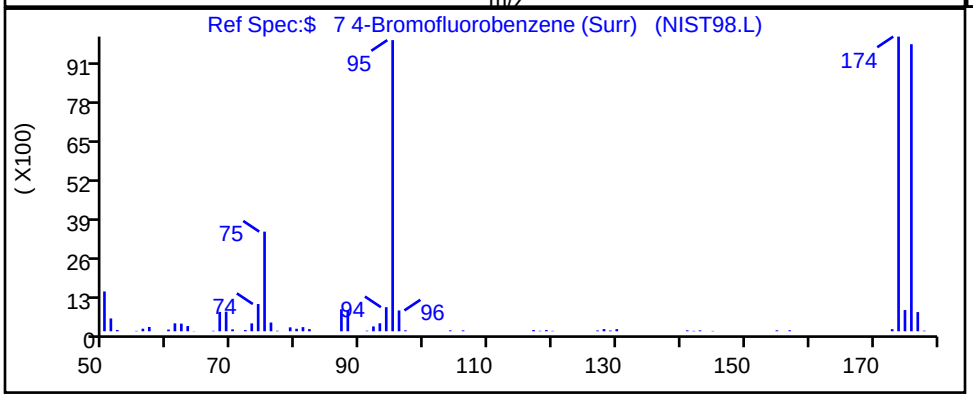
Processing Results











RT	Mass	Response	Amount
8.86	95.00	14951	0.492470
8.86	174.00	13421	

Reviewer: laveyt, 30-Apr-2019 16:52:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

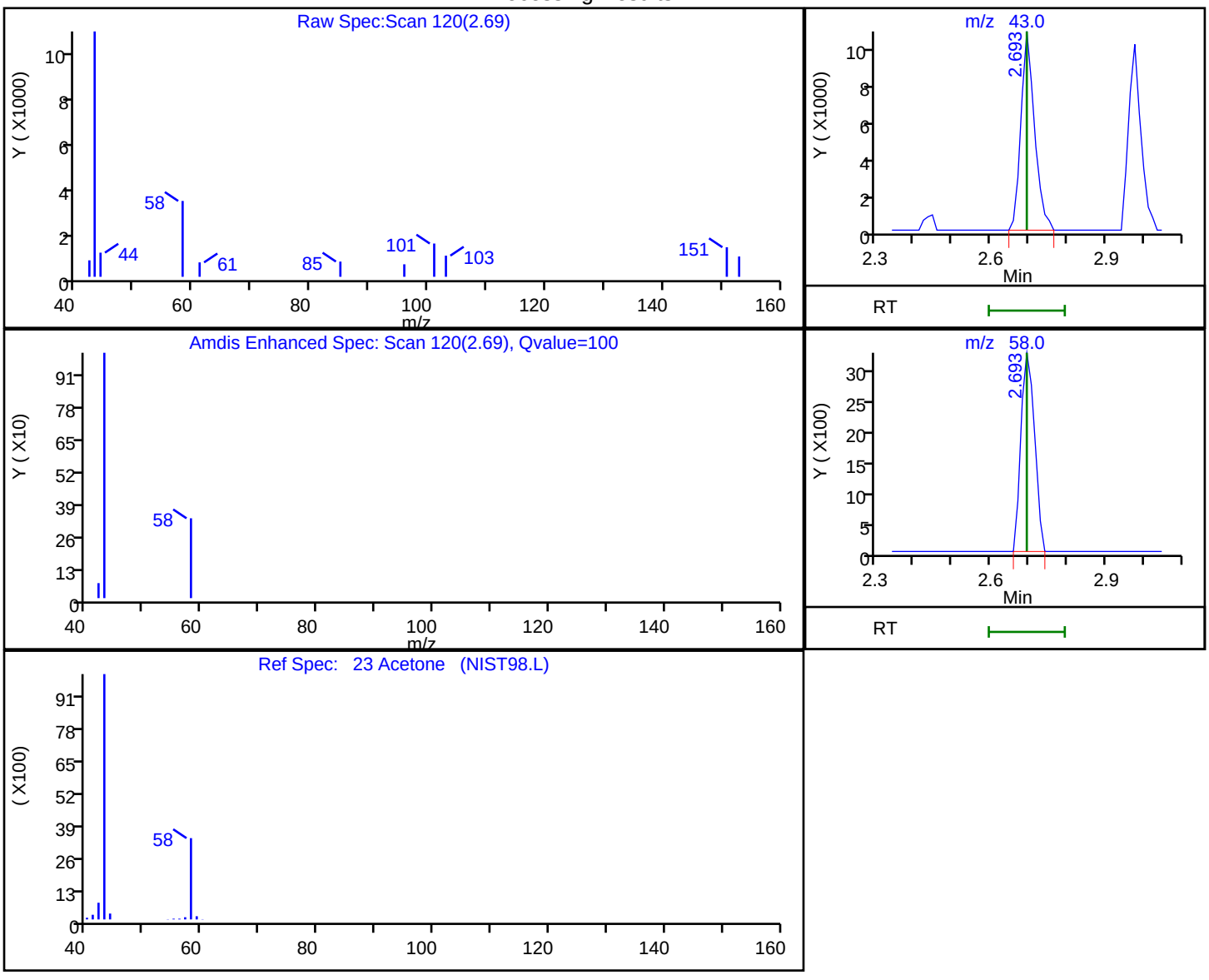
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.69	43.00	26506	0.965095
2.69	58.00	8203	

Reviewer: laveyt, 30-Apr-2019 16:45:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

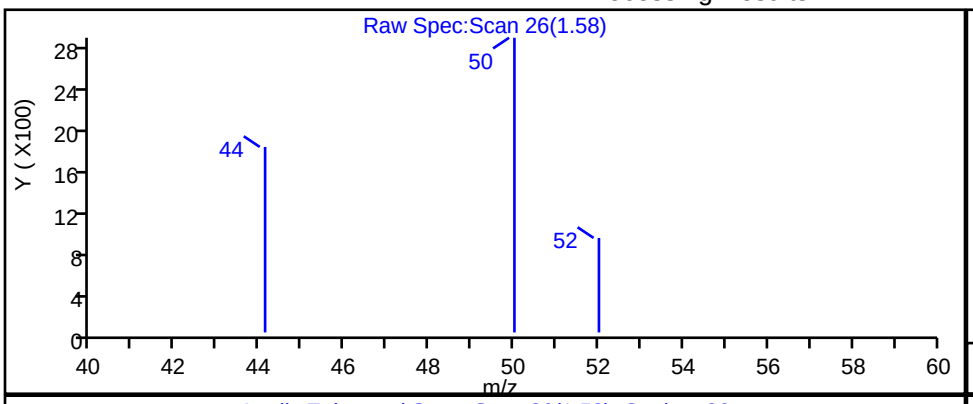
User Disabled Compound Report

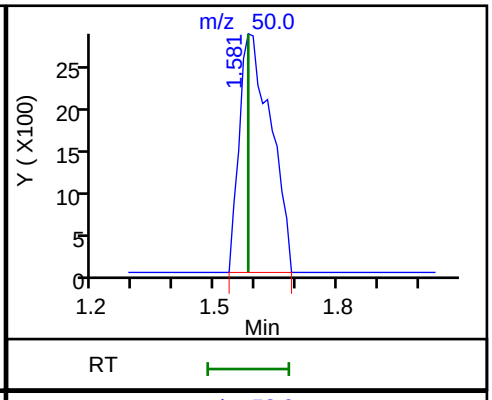
Eurofins TestAmerica, Canton

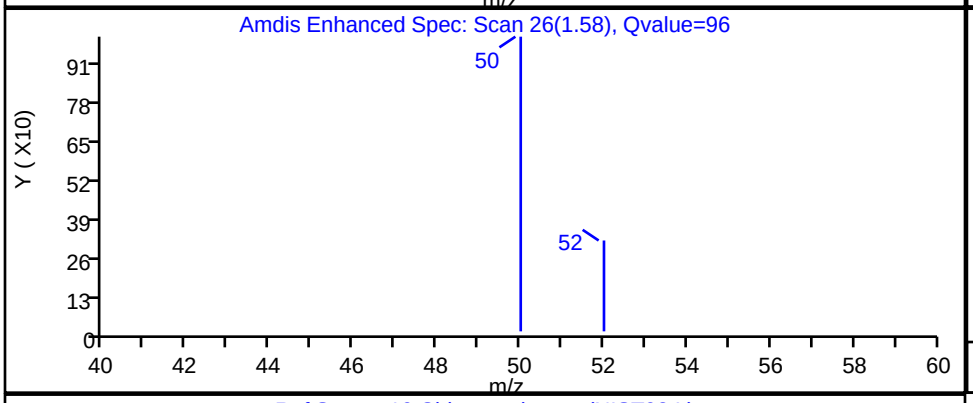
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

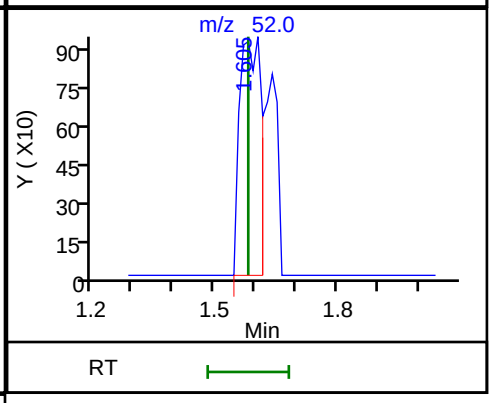
10 Chloromethane, CAS: 74-87-3

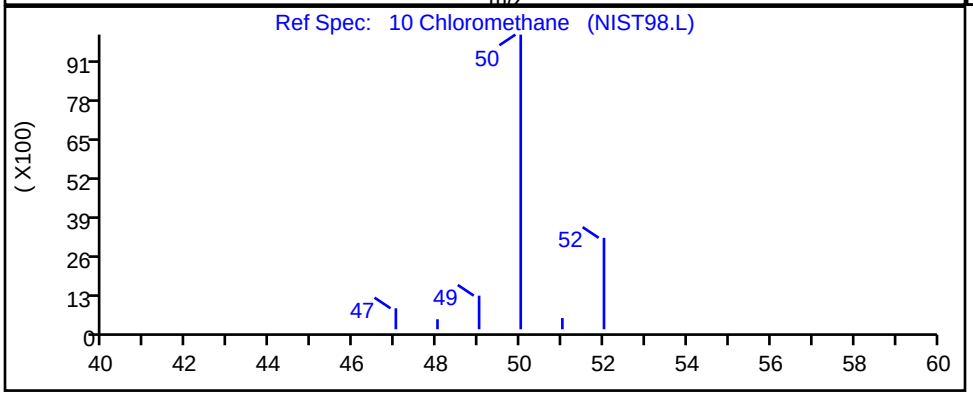
Processing Results











RT	Mass	Response	Amount
1.58	50.00	15543	0.628668
1.60	52.00	3453	

Reviewer: laveyt, 30-Apr-2019 16:44:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

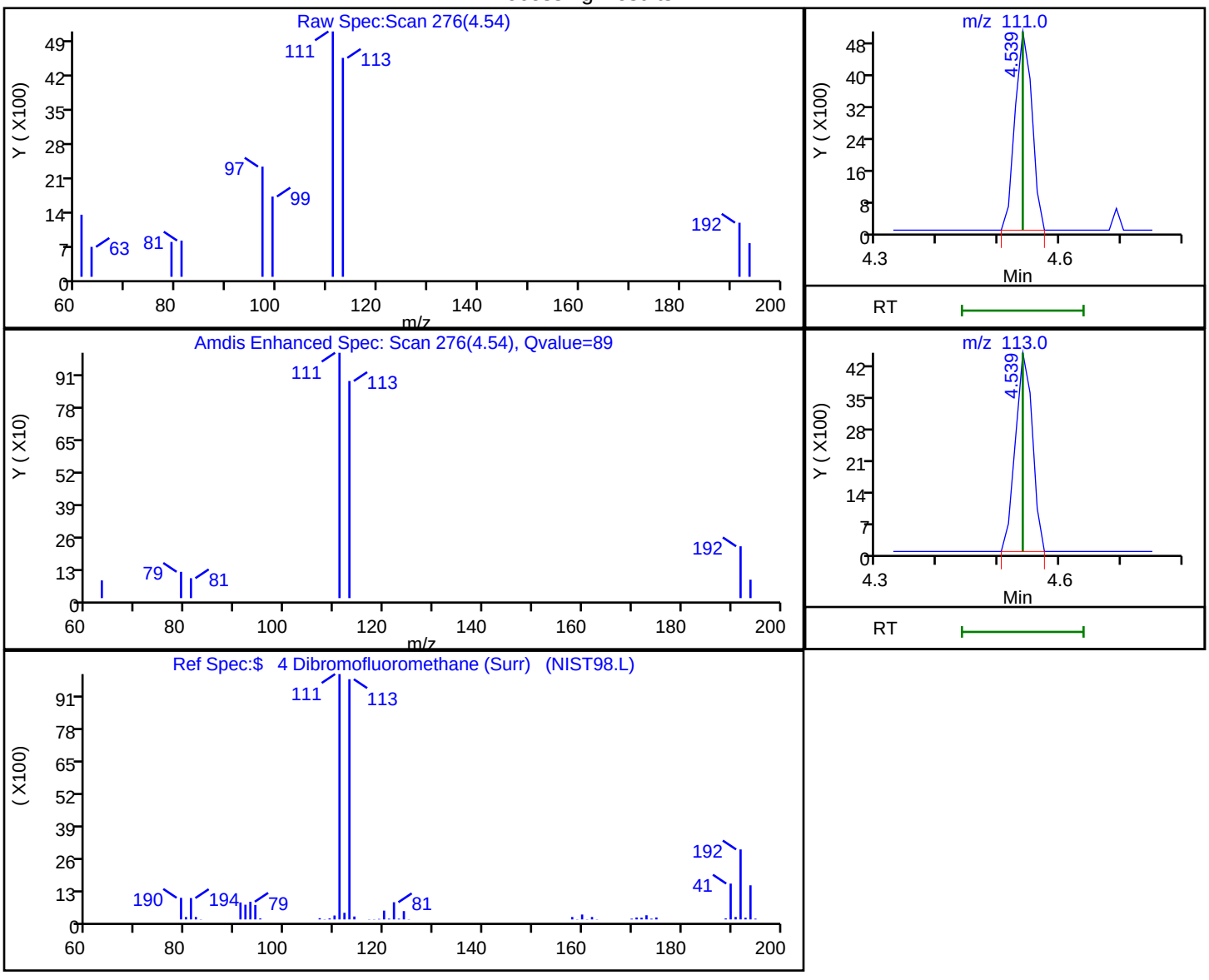
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D				
Injection Date:	30-Apr-2019 16:24:30	Instrument ID:	A3UX12		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	8	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

$ 4 Dibromofluoromethane (Surr), CAS: 1868-53-7

Processing Results



RT	Mass	Response	Amount
4.54	111.00	9661	0.581209
4.54	113.00	8696	

Reviewer: laveyt, 30-Apr-2019 16:51:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

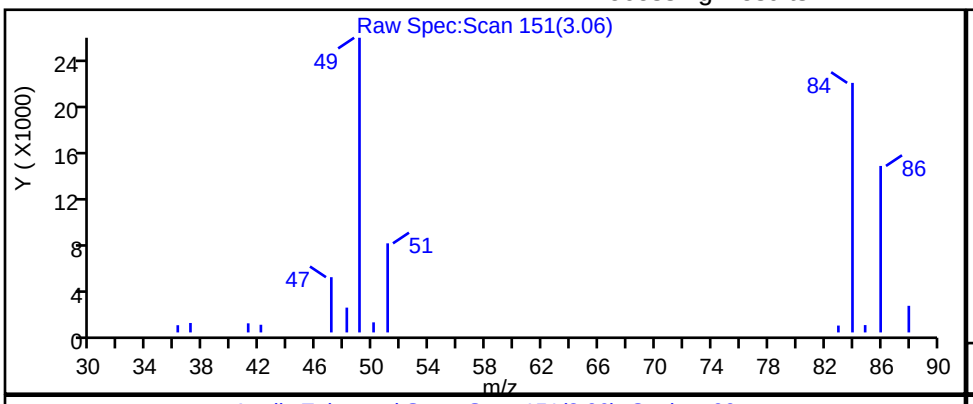
User Disabled Compound Report

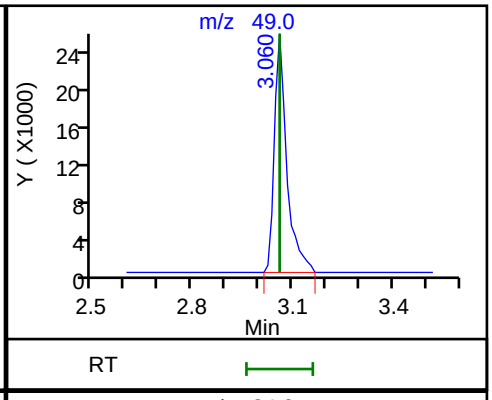
Eurofins TestAmerica, Canton

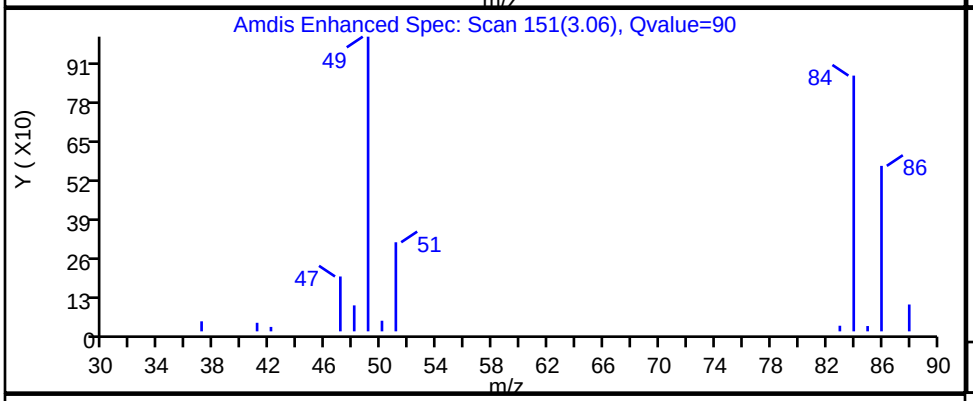
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

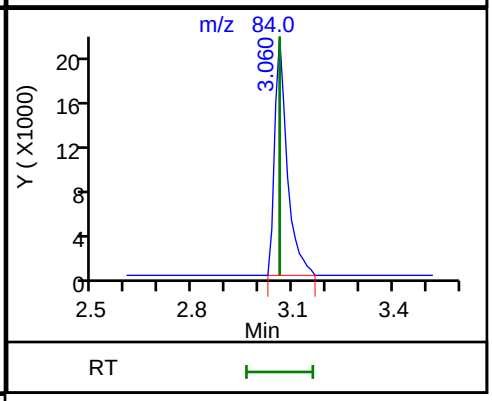
29 Methylene Chloride, CAS: 75-09-2

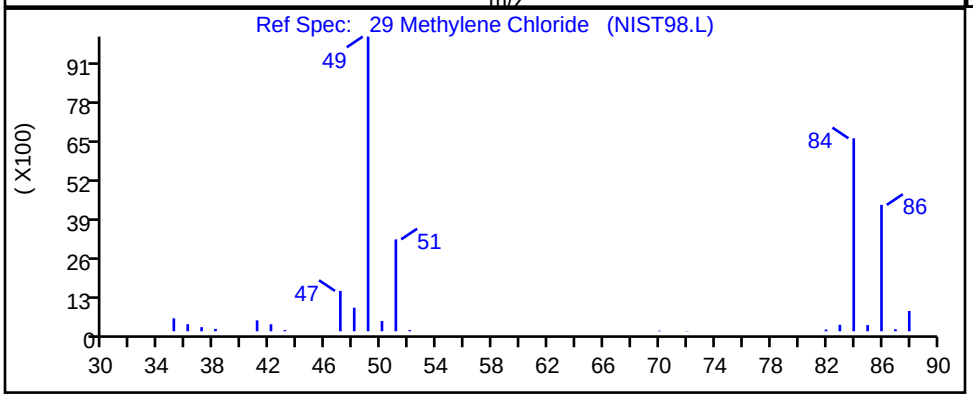
Processing Results











RT	Mass	Response	Amount
3.06	49.00	66051	0.488334
3.06	84.00	55788	

Reviewer: laveyt, 30-Apr-2019 16:46:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

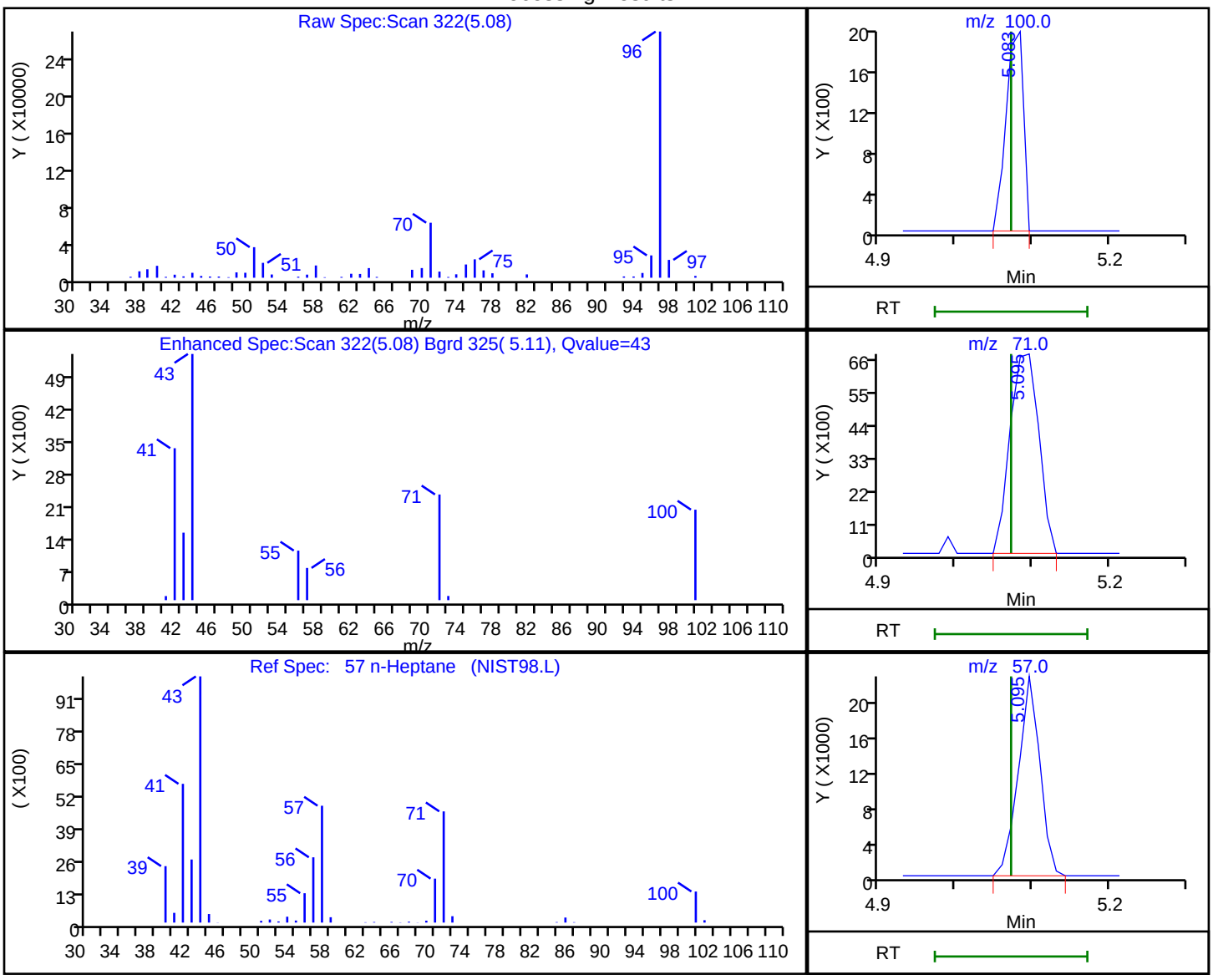
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

57 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
5.08	100.00	3106	
5.10	71.00	17689	
5.10	57.00	43825	0.492830

Reviewer: laveyt, 30-Apr-2019 16:54:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

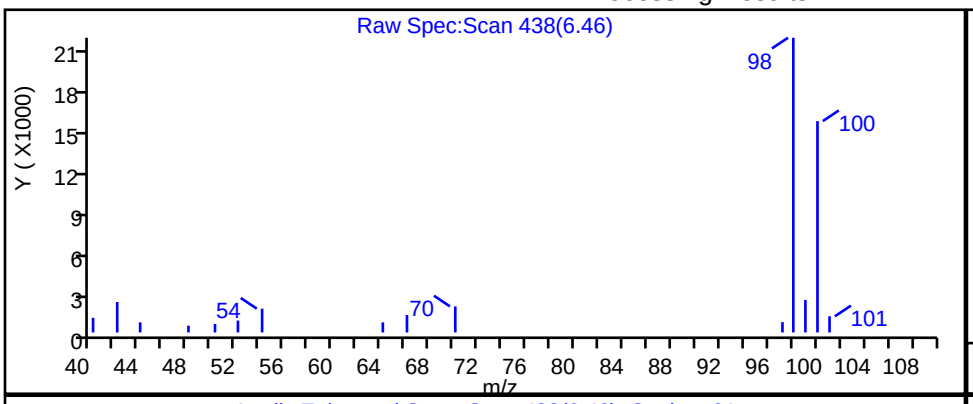
User Disabled Compound Report

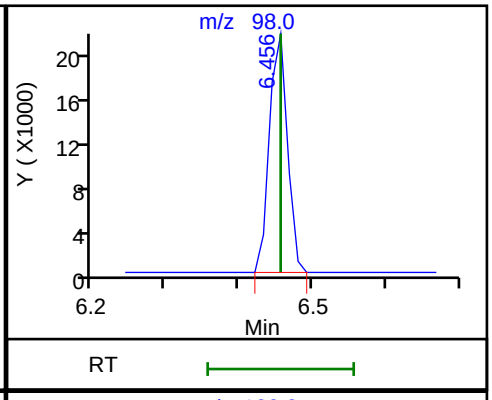
Eurofins TestAmerica, Canton

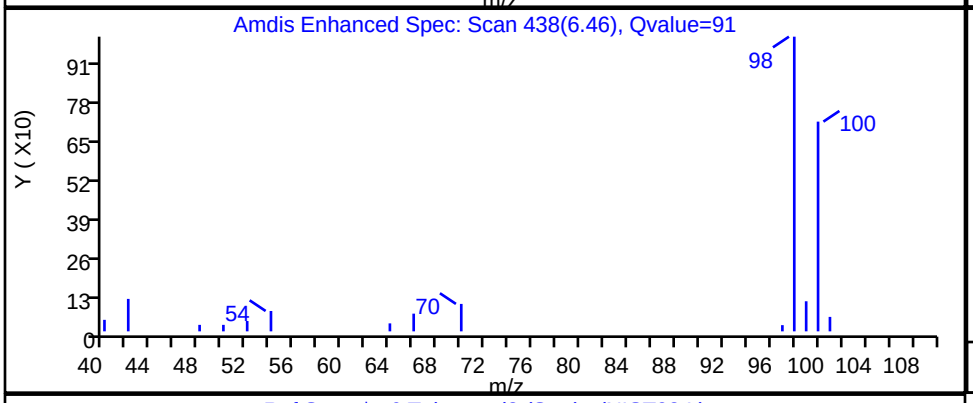
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

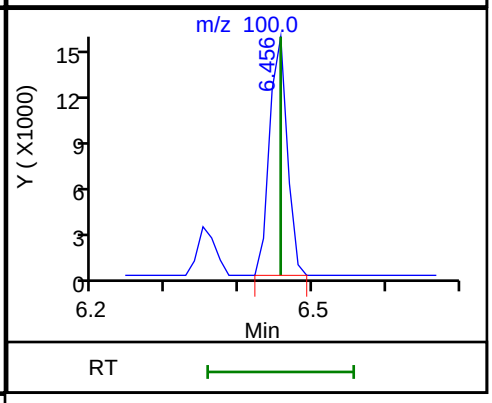
$ 6 Toluene-d8 (Surr), CAS: 2037-26-5

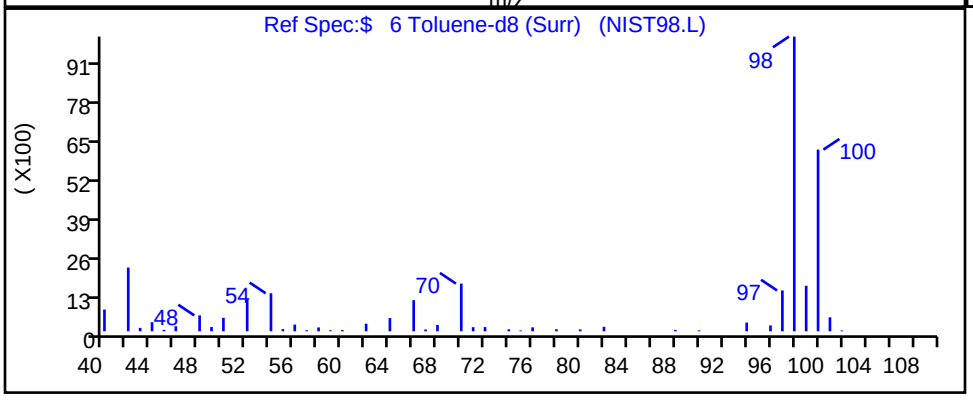
Processing Results











RT	Mass	Response	Amount
6.46	98.00	37355	0.620788
6.46	100.00	26225	

Reviewer: laveyt, 30-Apr-2019 16:52:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 378870

SDG No.: MSA Frog Mortar Creek

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				

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269805.D
Lims ID: stdA9 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Apr-2019 17:52:30 ALS Bottle#: 12 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-018
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:26 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:23:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1231609	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	59	787472	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.971	-0.001	94	450019	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	100	1139881	80.0	83.2	
26 Acetonitrile	41	2.930	2.942	-0.012	99	2937339	800.0	788.6	
37 Isopropyl ether	87	3.699	3.699	0.000	94	1328252	80.0	79.9	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	90	2331461	80.0	83.2	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	96	4314222	80.0	79.4	
43 Ethyl acetate	43	4.196	4.196	0.000	99	3398125	160.0	150.6	
44 Propionitrile	54	4.208	4.208	0.000	99	3538021	800.0	777.4	
45 Methacrylonitrile	41	4.338	4.326	0.012	90	10507625	800.0	690.5	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	98	4378322	80.0	78.4	
58 n-Butanol	56	5.344	5.344	0.000	84	2536242	2000.0	1739.5	
60 Ethyl acrylate	55	5.486	5.486	0.000	99	1864766	80.0	78.9	
63 Methyl methacrylate	41	5.687	5.687	0.000	89	2411882	160.0	153.6	
67 2-Nitropropane	41	6.030	6.030	0.000	99	764598	160.0	161.6	
79 n-Butyl acetate	43	7.202	7.202	0.000	97	2199815	80.0	79.5	
82 1-Chlorohexane	91	7.746	7.746	0.000	96	1809238	80.0	80.3	
91 Cyclohexanone	55	8.799	8.799	0.000	92	818532	800.0	780.9	
103 Pentachloroethane	167	9.615	9.604	0.011	92	1762320	160.0	176.6	
109 1,2,3-Trimethylbenzene	105	10.041	10.042	-0.001	98	5450282	80.0	82.0	
110 Benzyl chloride	91	10.136	10.136	0.000	98	3975844	80.0	82.9	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	98	2115775	80.0	74.7	
119 2-Methylnaphthalene	142	13.378	13.378	0.000	93	6271239	160.0	112.2	

Reagents:

vm50is_stk_A_00003 Amount Added: 2.00 Units: uL
vmra9w_00295 Amount Added: 64.00 Units: uL

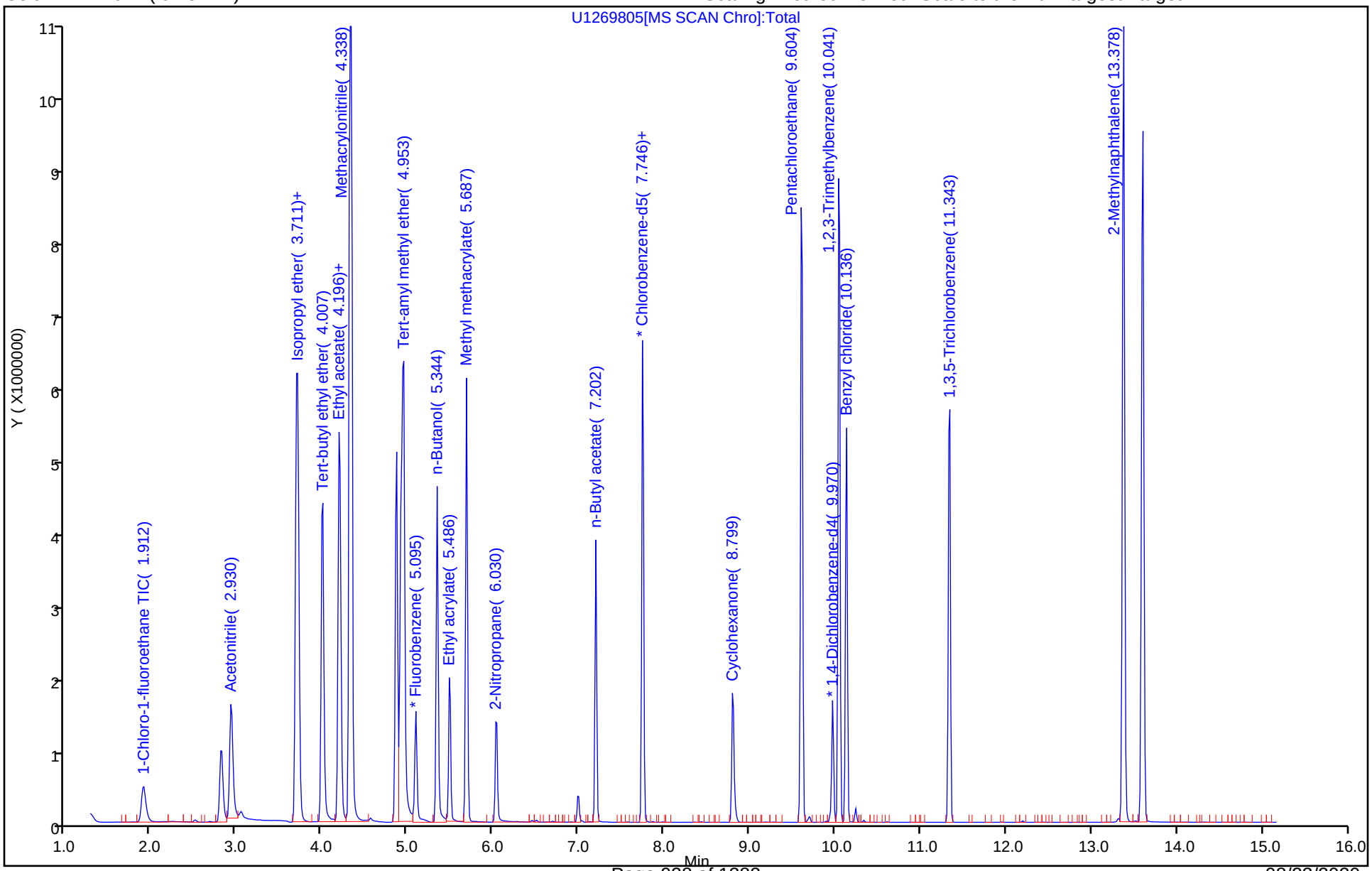
Report Date: 01-May-2019 13:34:27 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269805.D

Injection Date:	30-Apr-2019 17:52:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L7			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269806a.D
Lims ID: stdA9 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Apr-2019 18:14:30 ALS Bottle#: 13 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-019
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:30 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:27:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1213815	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	67	786859	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.971	-0.001	94	452339	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	99	840871	60.0	62.3	
26 Acetonitrile	41	2.930	2.942	-0.012	99	2101087	600.0	569.8	
37 Isopropyl ether	87	3.699	3.699	0.000	94	996957	60.0	60.9	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	89	1704173	60.0	61.7	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	97	3195035	60.0	59.6	
43 Ethyl acetate	43	4.196	4.196	0.000	98	2526193	120.0	113.6	
44 Propionitrile	54	4.208	4.208	0.000	99	2665338	600.0	592.3	
45 Methacrylonitrile	41	4.326	4.326	0.000	92	7907632	600.0	527.3	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	99	3262969	60.0	59.3	
58 n-Butanol	56	5.344	5.344	0.000	84	1898282	1500.0	1321.0	
60 Ethyl acrylate	55	5.486	5.486	0.000	99	1406385	60.0	60.4	
63 Methyl methacrylate	41	5.687	5.687	0.000	87	1767987	120.0	114.2	
67 2-Nitropropane	41	6.042	6.030	0.012	99	551865	120.0	118.3	
79 n-Butyl acetate	43	7.201	7.202	-0.001	97	1668759	60.0	60.4	
82 1-Chlorohexane	91	7.746	7.746	0.000	96	1358865	60.0	60.4	
91 Cyclohexanone	55	8.799	8.799	0.000	91	599459	600.0	569.4	
103 Pentachloroethane	167	9.615	9.604	0.011	92	1304124	120.0	130.0	
109 1,2,3-Trimethylbenzene	105	10.041	10.042	-0.001	98	4083704	60.0	61.1	
110 Benzyl chloride	91	10.136	10.136	0.000	98	2953444	60.0	61.2	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	98	1589890	60.0	55.9	
119 2-Methylnaphthalene	142	13.378	13.378	0.000	93	4794940	120.0	85.4	

Reagents:

vm50is_stk_A_00003 Amount Added: 2.00 Units: uL
vmra9w_00295 Amount Added: 48.00 Units: uL

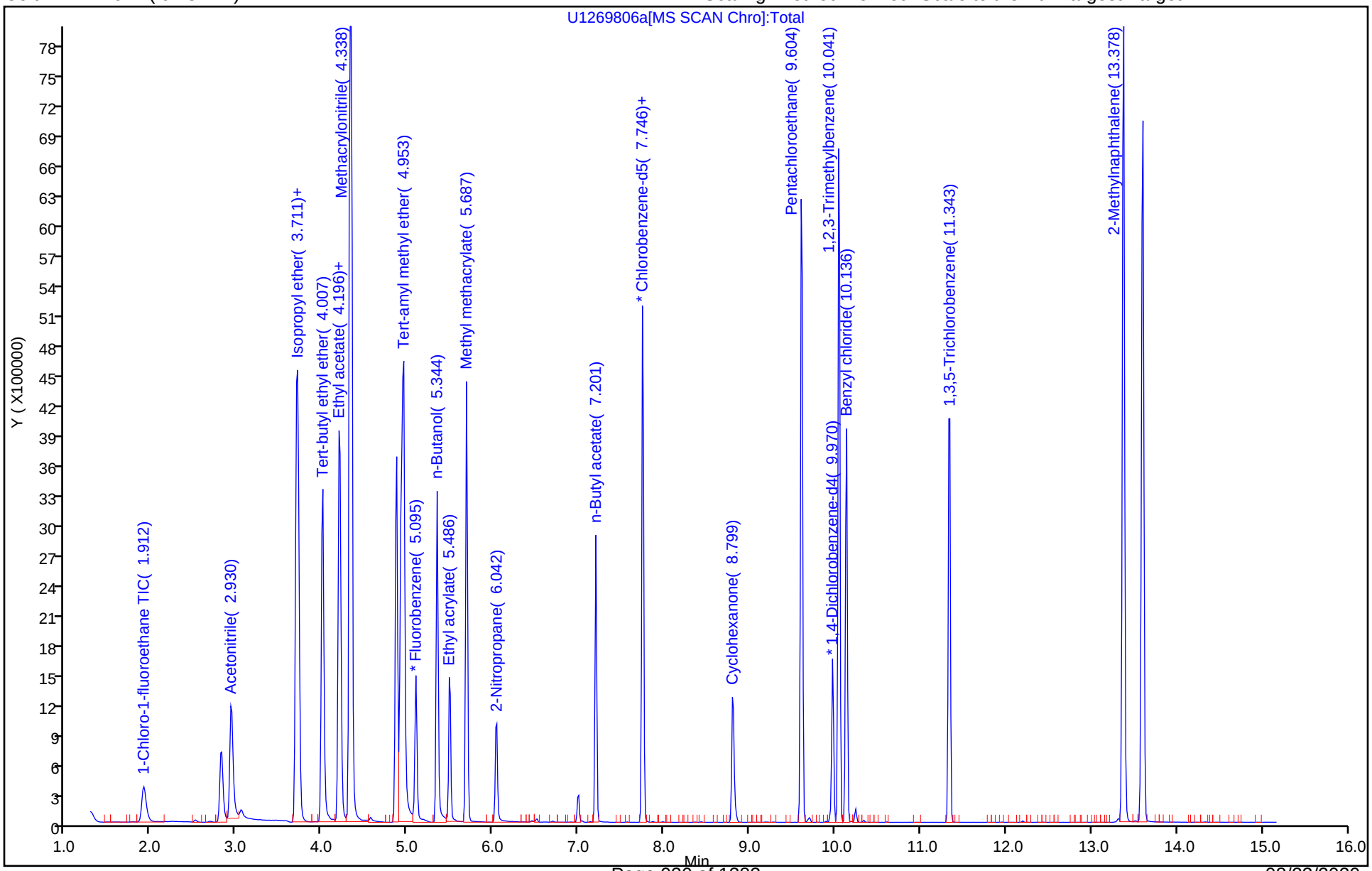
Report Date: 01-May-2019 13:34:31 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269806a.D

Injection Date:	30-Apr-2019 18:14:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L6			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269807.D
Lims ID: stdA9 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Apr-2019 18:37:30 ALS Bottle#: 14 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-020
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:34 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:24:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1204738	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	78	790773	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.971	-0.001	94	437947	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	99	564873	40.0	42.2	
26 Acetonitrile	41	2.930	2.942	-0.012	100	1532543	400.0	416.3	
37 Isopropyl ether	87	3.699	3.699	0.000	94	669786	40.0	41.2	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	90	1153399	40.0	42.1	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	97	2160558	40.0	40.6	
43 Ethyl acetate	43	4.196	4.196	0.000	99	1760036	80.0	79.8	
44 Propionitrile	54	4.208	4.208	0.000	99	1837399	400.0	408.8	
45 Methacrylonitrile	41	4.326	4.326	0.000	92	5530137	400.0	371.5	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	98	2215191	40.0	40.6	
58 n-Butanol	56	5.344	5.344	0.000	84	1305583	1000.0	915.4	
60 Ethyl acrylate	55	5.486	5.486	0.000	99	971753	40.0	42.0	
63 Methyl methacrylate	41	5.687	5.687	0.000	88	1265557	80.0	82.4	
67 2-Nitropropane	41	6.030	6.030	0.000	99	377049	80.0	81.4	
79 n-Butyl acetate	43	7.201	7.202	-0.001	97	1173240	40.0	42.2	
82 1-Chlorohexane	91	7.746	7.746	0.000	96	947724	40.0	41.9	
91 Cyclohexanone	55	8.799	8.799	0.000	91	429161	400.0	402.4	
103 Pentachloroethane	167	9.615	9.604	0.011	91	878170	80.0	90.4	
109 1,2,3-Trimethylbenzene	105	10.041	10.042	-0.001	98	2794328	40.0	43.2	
110 Benzyl chloride	91	10.136	10.136	0.000	98	1985115	40.0	42.5	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	98	1098427	40.0	39.9	
119 2-Methylnaphthalene	142	13.378	13.378	0.000	93	3502147	80.0	64.4	

Reagents:

vm50is_stk_A_00003 Amount Added: 2.00 Units: uL
vmra9w_00295 Amount Added: 32.00 Units: uL

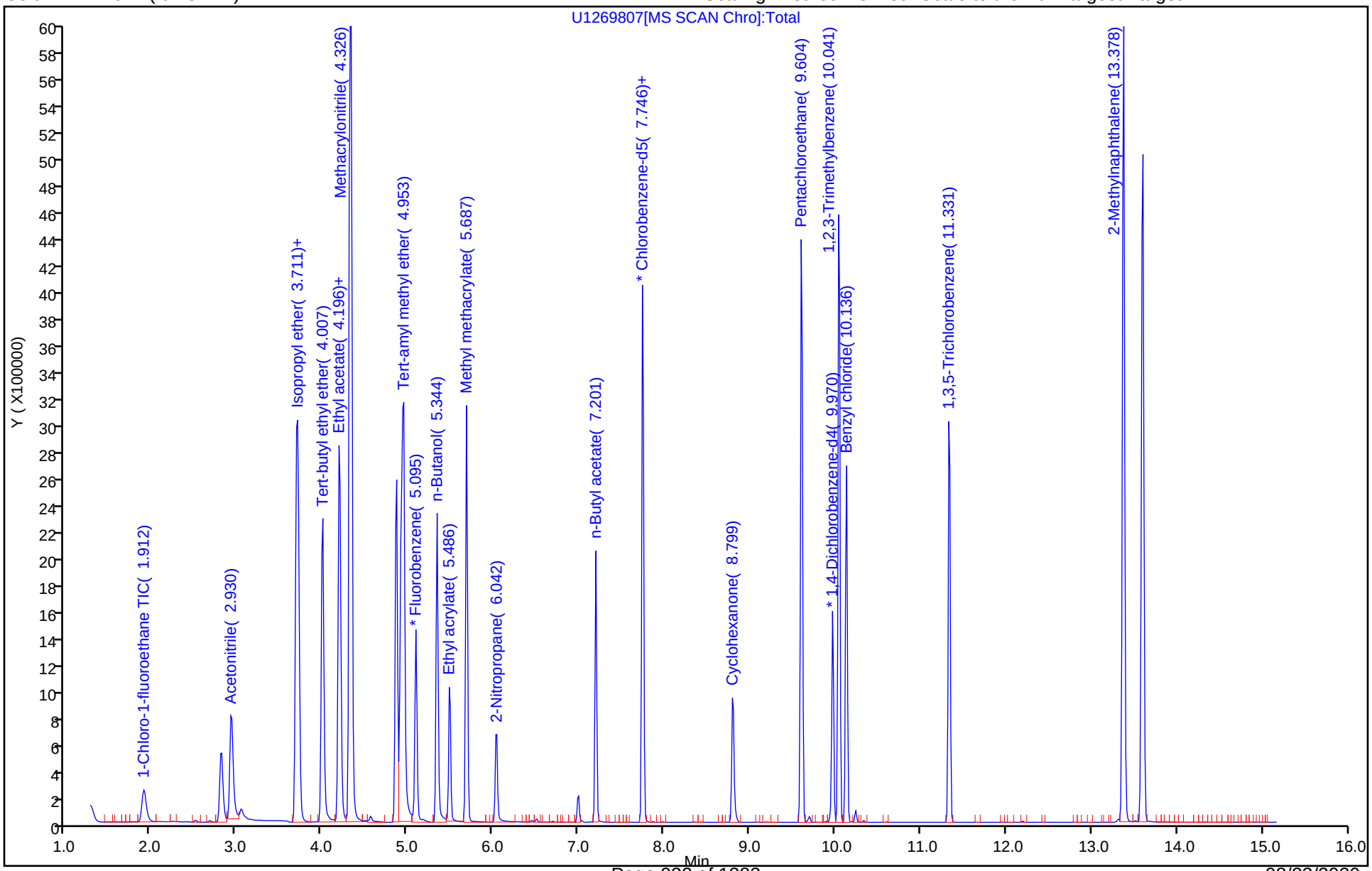
Report Date: 01-May-2019 13:34:36 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269807.D

Injection Date:	30-Apr-2019 18:37:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L5			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269808.D
Lims ID: stdA9 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Apr-2019 18:59:30 ALS Bottle#: 15 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-021
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:39 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:24:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1259919	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	84	866975	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.971	0.000	94	477773	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	99	279594	20.0	20.0	
26 Acetonitrile	41	2.942	2.942	0.000	100	871009	200.0	221.9	
37 Isopropyl ether	87	3.699	3.699	0.000	94	329172	20.0	19.4	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	89	559516	20.0	19.5	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	97	1071213	20.0	19.3	
43 Ethyl acetate	43	4.196	4.196	0.000	99	980925	40.0	42.5	
44 Propionitrile	54	4.208	4.208	0.000	99	1053523	200.0	220.3	
45 Methacrylonitrile	41	4.326	4.326	0.000	92	3119038	200.0	200.4	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	97	1091058	20.0	19.1	
58 n-Butanol	56	5.344	5.344	0.000	84	748361	500.0	501.7	
60 Ethyl acrylate	55	5.486	5.486	0.000	99	551287	20.0	22.8	
63 Methyl methacrylate	41	5.687	5.687	0.000	88	709925	40.0	44.2	
67 2-Nitropropane	41	6.030	6.030	0.000	98	203229	40.0	42.0	
79 n-Butyl acetate	43	7.202	7.202	0.000	97	629474	20.0	20.7	
82 1-Chlorohexane	91	7.746	7.746	0.000	98	492974	20.0	19.9	
91 Cyclohexanone	55	8.799	8.799	0.000	91	283168	200.0	237.8	
103 Pentachloroethane	167	9.604	9.604	0.000	90	425029	40.0	40.1	
109 1,2,3-Trimethylbenzene	105	10.042	10.042	0.000	98	1397402	20.0	19.8	
110 Benzyl chloride	91	10.136	10.136	0.000	98	1010740	20.0	19.8	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	98	577890	20.0	19.2	
119 2-Methylnaphthalene	142	13.378	13.378	0.000	93	2324694	40.0	39.2	

Reagents:

vm50is_stk_A_00003 Amount Added: 2.00 Units: uL
vmra9w_00295 Amount Added: 16.00 Units: uL

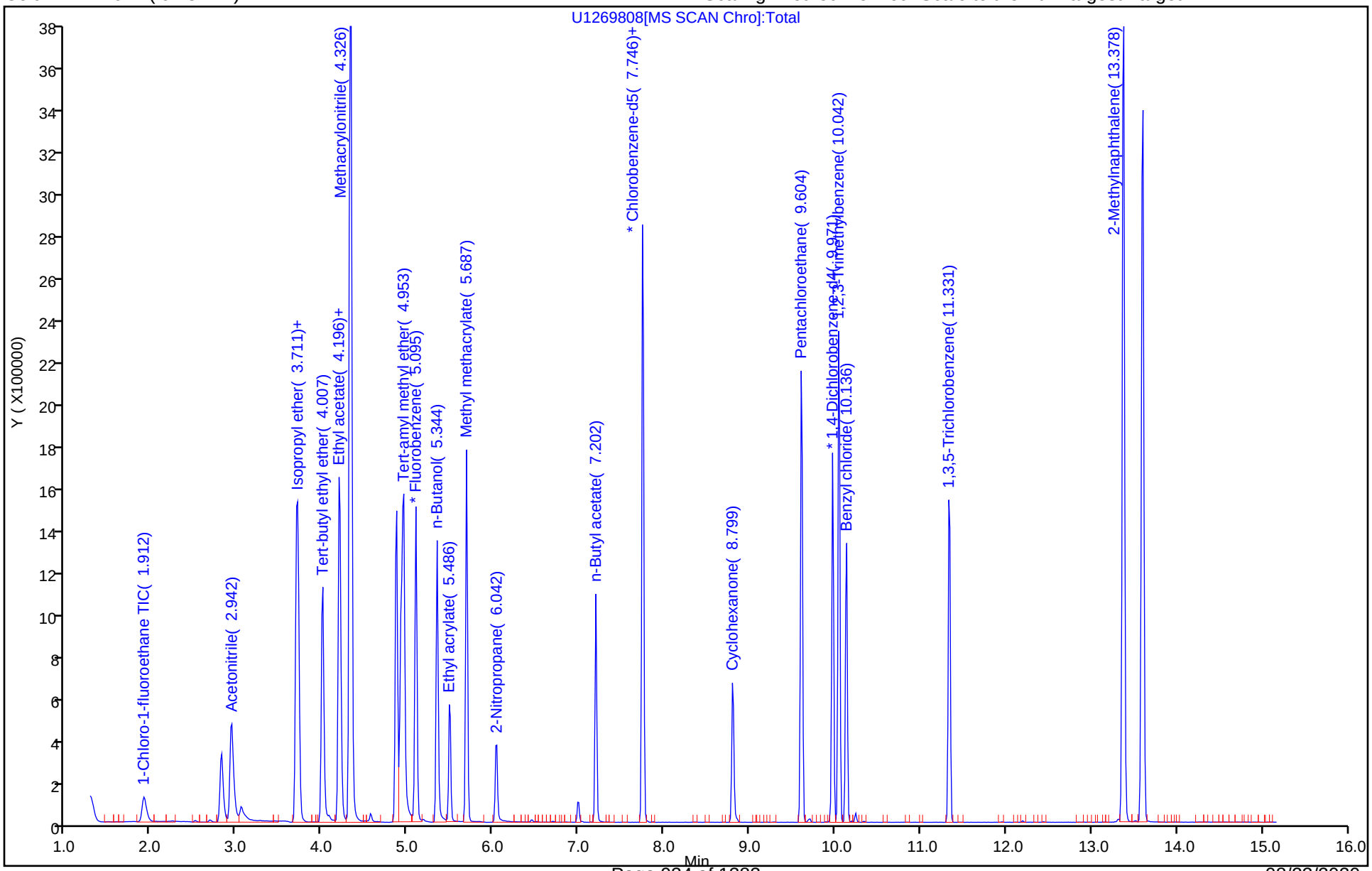
Report Date: 01-May-2019 13:34:41 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269808.D

Injection Date:	30-Apr-2019 18:59:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L4			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269809.D
Lims ID: stdA9 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Apr-2019 19:21:30 ALS Bottle#: 16 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-022
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:45 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:25:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1200078	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	85	774797	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.971	0.000	94	434033	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	99	113596	10.0	8.51	
26 Acetonitrile	41	2.942	2.942	0.000	100	409382	100.0	104.8	
37 Isopropyl ether	87	3.699	3.699	0.000	94	141946	10.0	8.77	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	90	229589	10.0	8.41	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	96	479805	10.0	9.06	
43 Ethyl acetate	43	4.196	4.196	0.000	99	412608	20.0	18.8	
44 Propionitrile	54	4.208	4.208	0.000	99	485430	100.0	102.2	
45 Methacrylonitrile	41	4.326	4.326	0.000	92	1404926	100.0	94.8	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	98	504826	10.0	9.28	
58 n-Butanol	56	5.344	5.344	0.000	84	333535	250.0	234.8	
60 Ethyl acrylate	55	5.486	5.486	0.000	99	213092	10.0	9.25	
63 Methyl methacrylate	41	5.687	5.687	0.000	89	285867	20.0	18.7	
67 2-Nitropropane	41	6.030	6.030	0.000	98	80875	20.0	17.5	
79 n-Butyl acetate	43	7.202	7.202	0.000	97	254037	10.0	9.34	
82 1-Chlorohexane	91	7.746	7.746	0.000	94	177328	10.0	8.00	
91 Cyclohexanone	55	8.799	8.799	0.000	91	124978	100.0	111.9	
103 Pentachloroethane	167	9.616	9.604	0.012	89	166979	20.0	17.4	
109 1,2,3-Trimethylbenzene	105	10.042	10.042	0.000	98	551639	10.0	8.61	
110 Benzyl chloride	91	10.136	10.136	0.000	98	414592	10.0	8.96	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	98	225441	10.0	8.26	
119 2-Methylnaphthalene	142	13.378	13.378	0.000	93	974233	20.0	18.1	

Reagents:

vm50is_stk_A_00003 Amount Added: 2.00 Units: uL
vmra9w_00295 Amount Added: 8.00 Units: uL

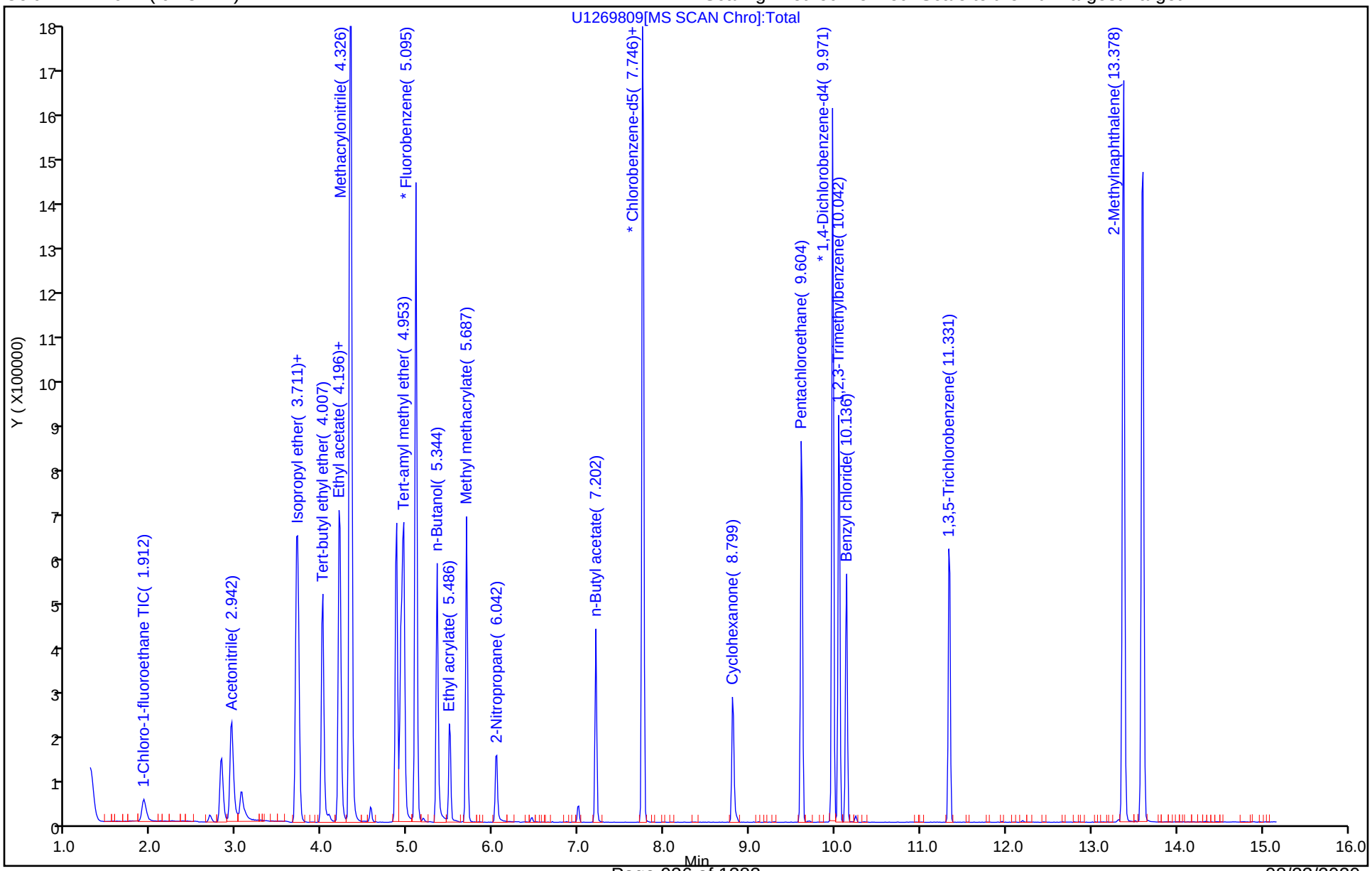
Report Date: 01-May-2019 13:34:47 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269809.D

Injection Date:	30-Apr-2019 19:21:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L3			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269810.D
Lims ID: stdA9 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Apr-2019 19:43:30 ALS Bottle#: 17 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-023
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:50 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:25:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1173891	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	84	759721	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.971	-0.001	94	447620	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	96	13857	1.00	1.06	
26 Acetonitrile	41	2.942	2.942	0.000	100	63285	10.0	8.67	
37 Isopropyl ether	87	3.699	3.699	0.000	94	16227	1.00	1.02	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	89	26905	1.00	1.01	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	96	56113	1.00	1.08	
43 Ethyl acetate	43	4.196	4.196	0.000	99	46743	2.00	2.17	
44 Propionitrile	54	4.208	4.208	0.000	99	74659	10.0	8.95	
45 Methacrylonitrile	41	4.326	4.326	0.000	92	186608	10.0	12.9	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	96	58983	1.00	1.11	
58 n-Butanol	56	5.344	5.344	0.000	86	48347	25.0	34.8	
60 Ethyl acrylate	55	5.486	5.486	0.000	98	21871	1.00	0.9710	
63 Methyl methacrylate	41	5.687	5.687	0.000	91	31407	2.00	2.10	
67 2-Nitropropane	41	6.030	6.030	0.000	94	10267	2.00	2.28	
79 n-Butyl acetate	43	7.202	7.202	0.000	97	27432	1.00	1.03	
82 1-Chlorohexane	91	7.746	7.746	0.000	35	21851	1.00	1.01	
91 Cyclohexanone	55	8.799	8.799	0.000	89	18555	10.0	7.61	
103 Pentachloroethane	167	9.604	9.604	0.000	87	17876	2.00	1.80	
109 1,2,3-Trimethylbenzene	105	10.042	10.042	0.000	98	65393	1.00	0.9891	
110 Benzyl chloride	91	10.136	10.136	0.000	98	48324	1.00	1.01	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	98	32979	1.00	1.17	
119 2-Methylnaphthalene	142	13.378	13.378	0.000	94	211087	2.00	3.80	

Reagents:

vm50is_stk_A_00003 Amount Added: 2.00 Units: uL
vmra9w_00295 Amount Added: 0.80 Units: uL

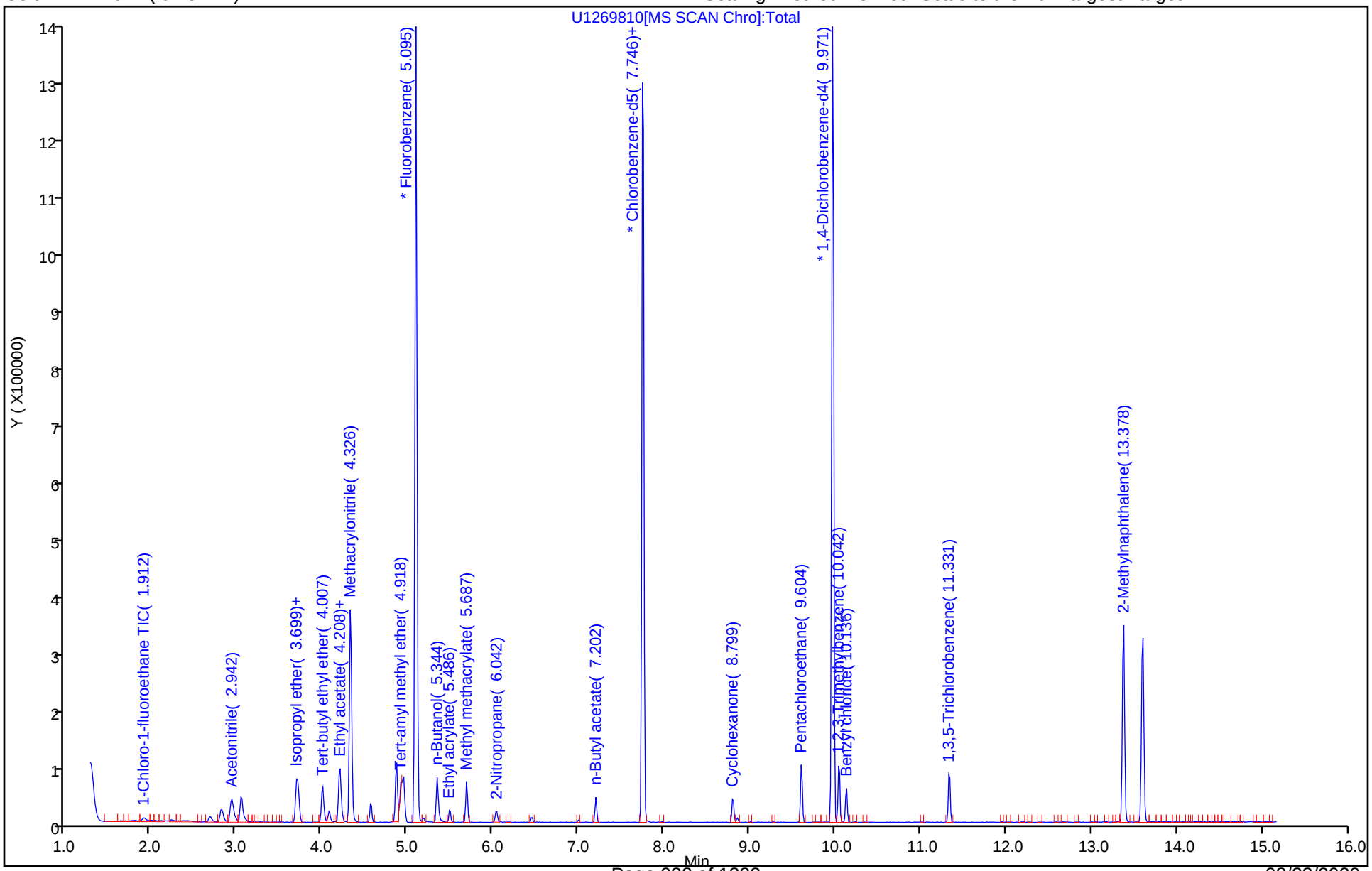
Report Date: 01-May-2019 13:34:51 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269810.D

Injection Date:	30-Apr-2019 19:43:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L2			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D
Lims ID: stdA9 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Apr-2019 20:05:30 ALS Bottle#: 18 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-024
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub1

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:34:55 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: CTX0337

First Level Reviewer: laveyt Date: 01-May-2019 13:26:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1180840	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	85	766902	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.971	0.000	95	438796	20.0	20.0	
13 1-Chloro-1-fluoroethane TI	47	1.912	1.912	0.000	95	6280	0.5000	0.4783	
26 Acetonitrile	41		2.942				ND	ND	U
37 Isopropyl ether	87	3.699	3.699	0.000	94	8647	0.5000	0.5428	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	88	14129	0.5000	0.5262	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	95	27251	0.5000	0.5229	
43 Ethyl acetate	43	4.196	4.196	0.000	99	22198	1.00	1.03	
44 Propionitrile	54		4.208				ND	ND	U
45 Methacrylonitrile	41	4.326	4.326	0.000	91	79733	5.00	5.47	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	97	27432	0.5000	0.5125	
58 n-Butanol	56		5.344				ND	ND	U
60 Ethyl acrylate	55	5.486	5.486	0.000	96	10419	0.5000	0.4598	
63 Methyl methacrylate	41	5.687	5.687	0.000	88	14620	1.00	0.9709	
67 2-Nitropropane	41	6.030	6.030	0.000	91	4184	1.00	0.9221	
79 n-Butyl acetate	43	7.202	7.202	0.000	94	12754	0.5000	0.4736	
82 1-Chlorohexane	91	7.746	7.746	0.000	34	12533	0.5000	0.5713	
91 Cyclohexanone	55		8.799				ND	ND	U
103 Pentachloroethane	167	9.604	9.604	0.000	85	8865	1.00	0.9111	
109 1,2,3-Trimethylbenzene	105	10.042	10.042	0.000	97	33584	0.5000	0.5182	
110 Benzyl chloride	91	10.136	10.136	0.000	97	22933	0.5000	0.4902	
114 1,3,5-Trichlorobenzene	180	11.343	11.343	0.000	95	16295	0.5000	0.5902	
119 2-Methylnaphthalene	142		13.378				ND	ND	U

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags
U - Marked Undetected

Reagents:

vm50is_stk_A_00003	Amount Added:	2.00	Units: uL
vmra9w_00295	Amount Added:	0.40	Units: uL

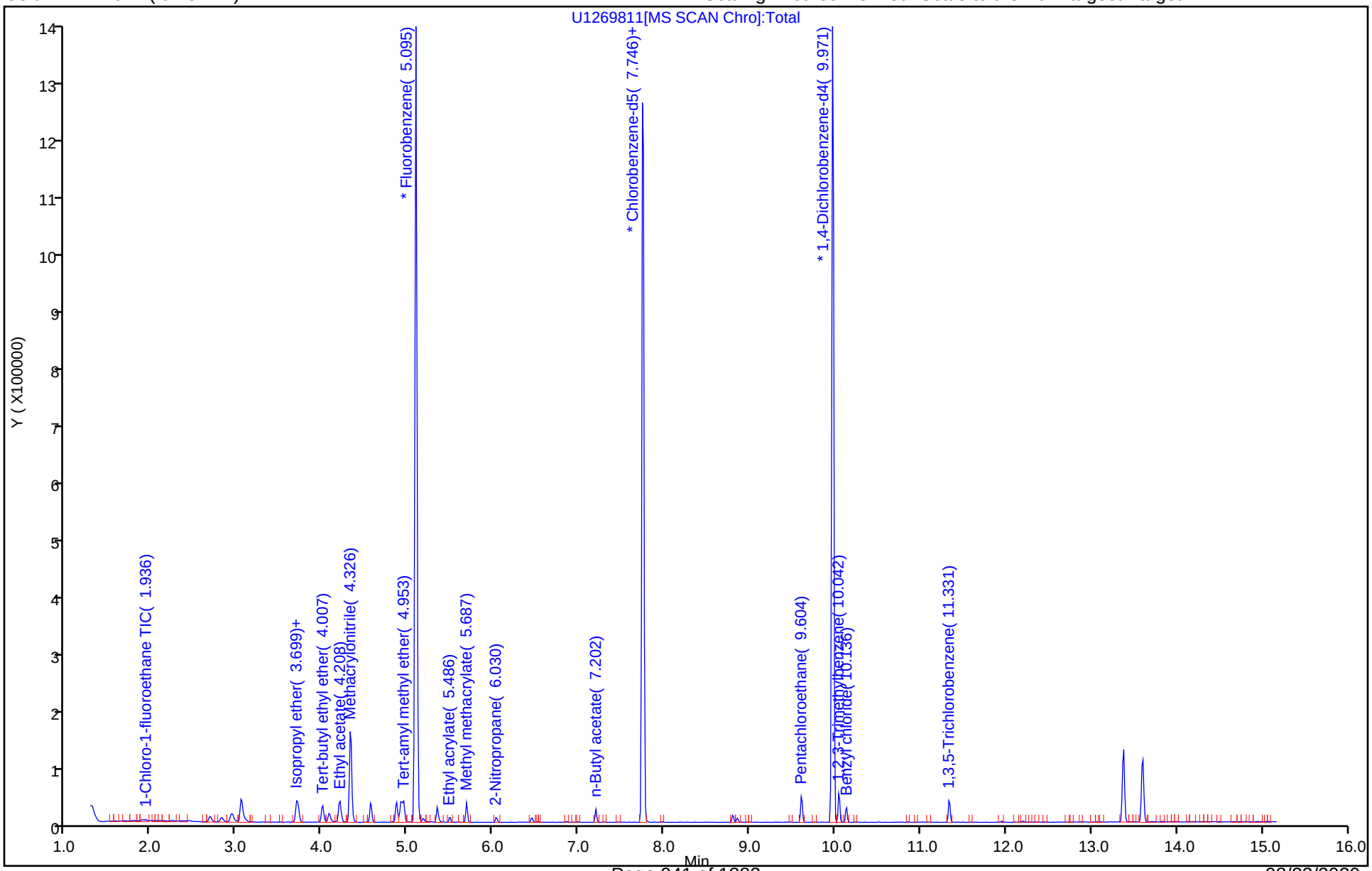
Report Date: 01-May-2019 13:34:56 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Injection Date:	30-Apr-2019 20:05:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	stdA9 L1			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



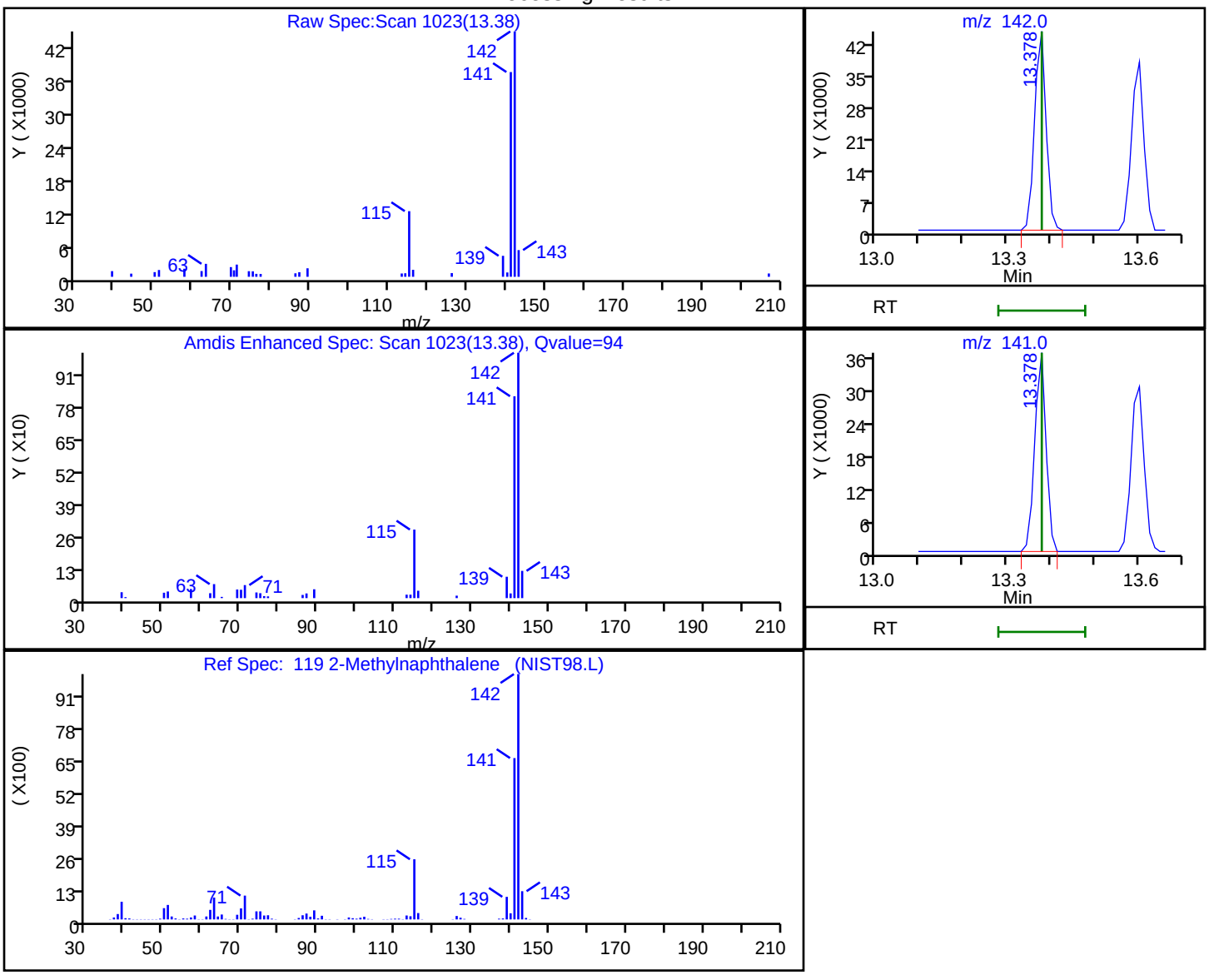
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D				
Injection Date:	30-Apr-2019 20:05:30	Instrument ID:	A3UX12		
Lims ID:	stdA9 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

119 2-Methylnaphthalene, CAS: 91-57-6

Processing Results



RT	Mass	Response	Amount
13.38	142.00	81429	1.395851
13.38	141.00	66741	

Reviewer: laveyt, 01-May-2019 13:31:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

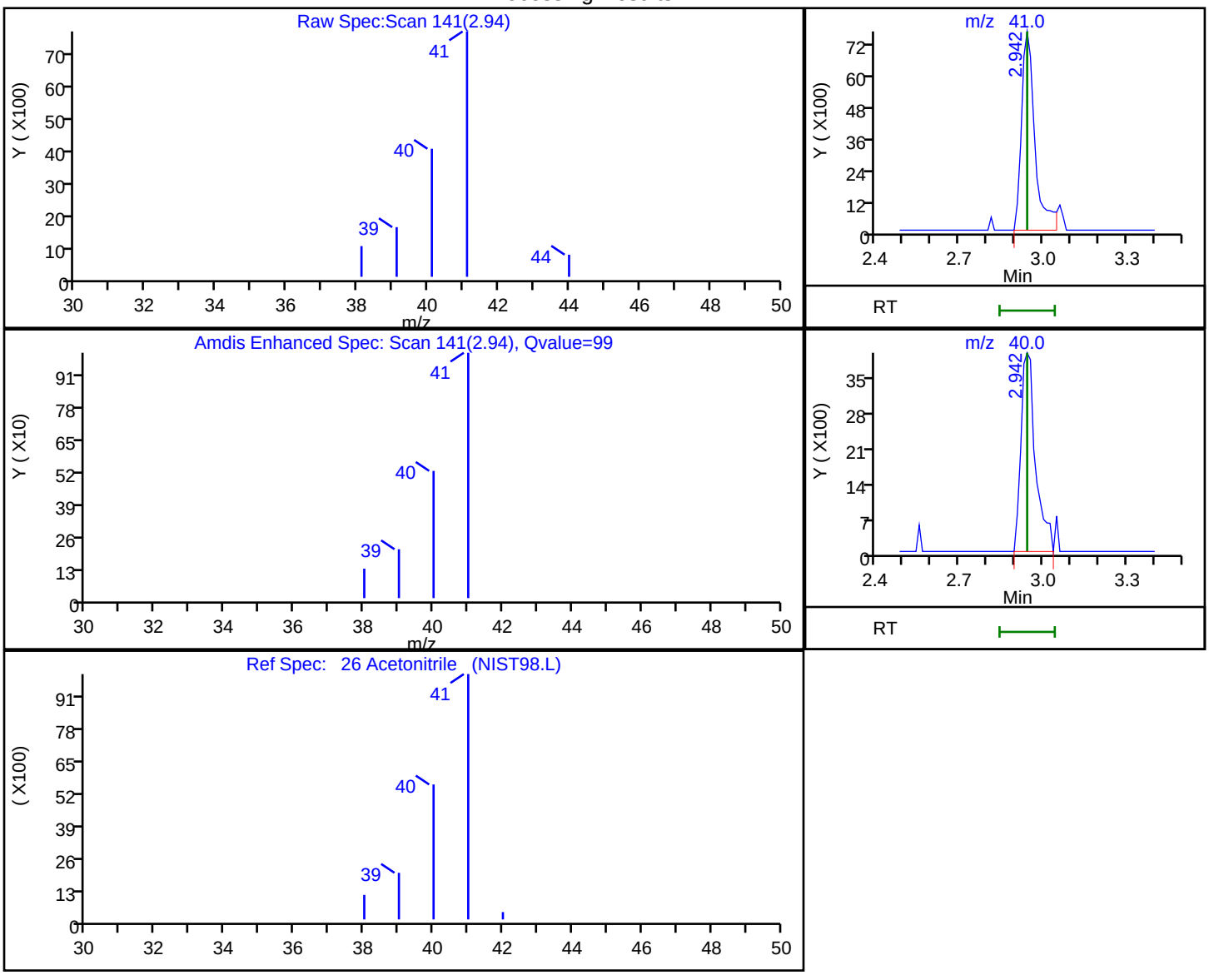
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D				
Injection Date:	30-Apr-2019 20:05:30	Instrument ID:	A3UX12		
Lims ID:	stdA9 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
2.94	41.00	25845	2.584425
2.94	40.00	14648	

Reviewer: laveyt, 01-May-2019 13:28:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

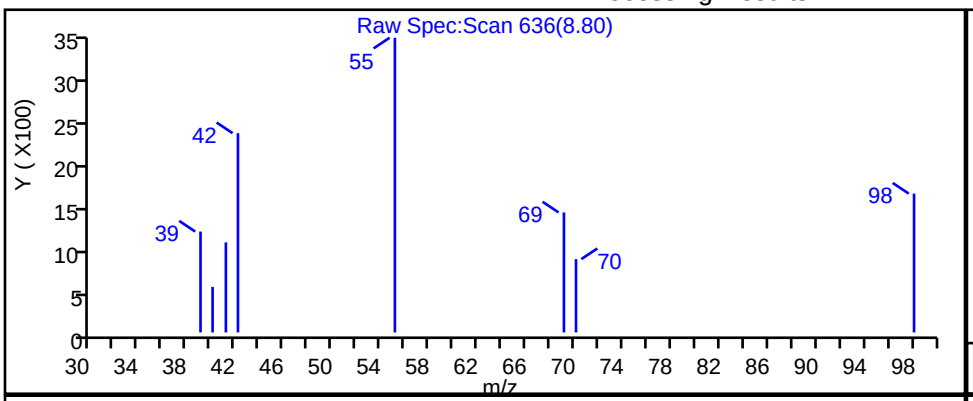
User Disabled Compound Report

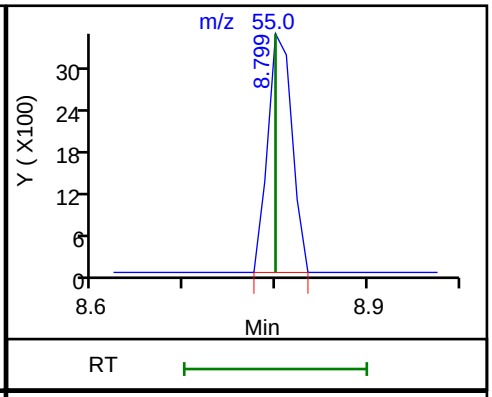
Eurofins TestAmerica, Canton

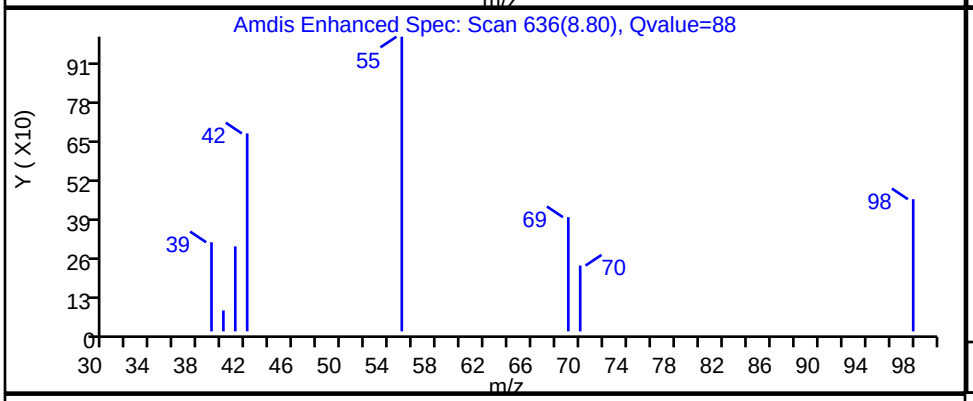
Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D				
Injection Date:	30-Apr-2019 20:05:30	Instrument ID:	A3UX12		
Lims ID:	stdA9 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

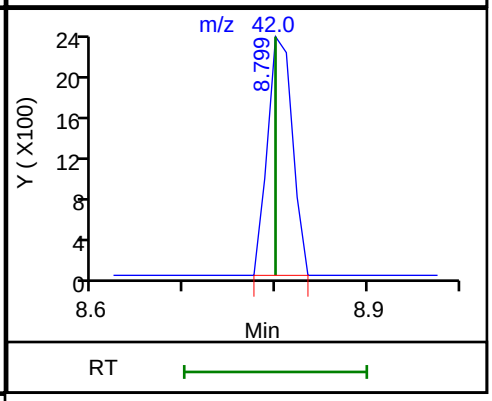
91 Cyclohexanone, CAS: 108-94-1

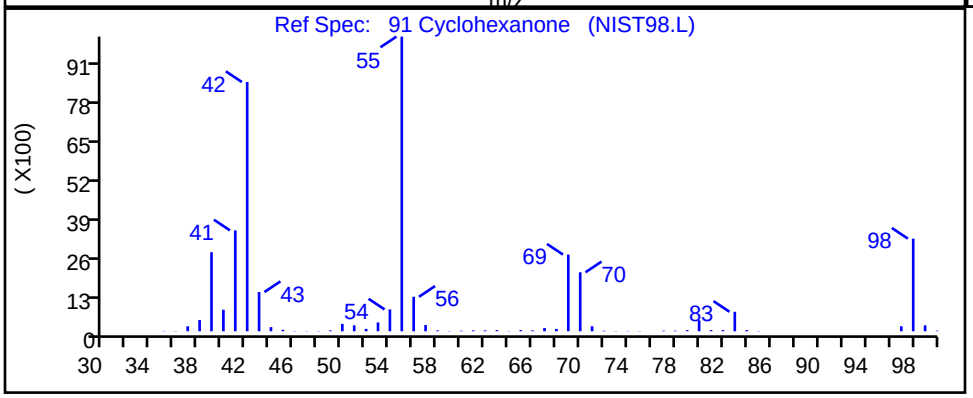
Processing Results











RT	Mass	Response	Amount
8.80	55.00	6285	1.672256
8.80	42.00	4364	

Reviewer: laveyt, 01-May-2019 13:29:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

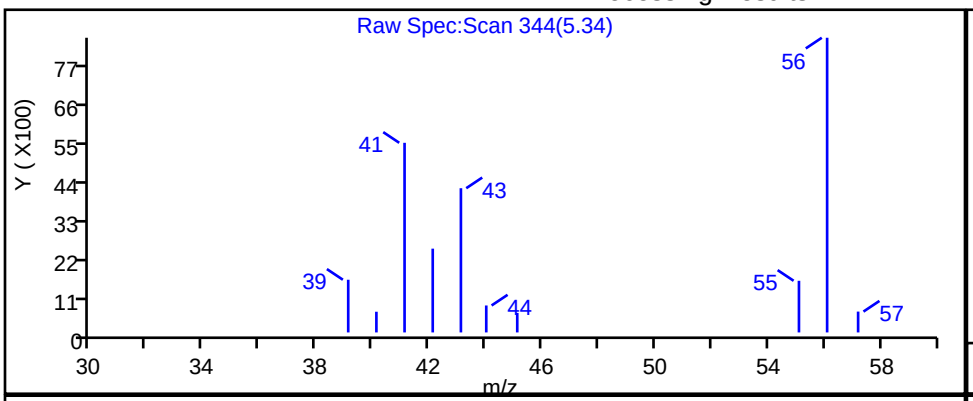
User Disabled Compound Report

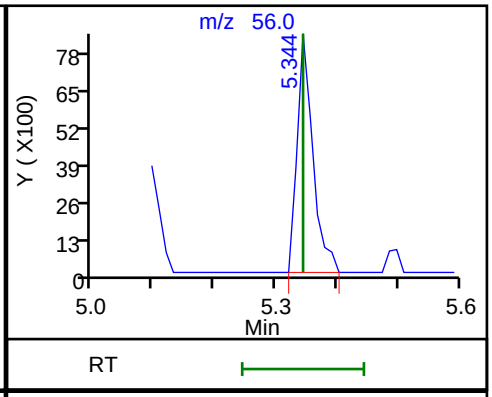
Eurofins TestAmerica, Canton

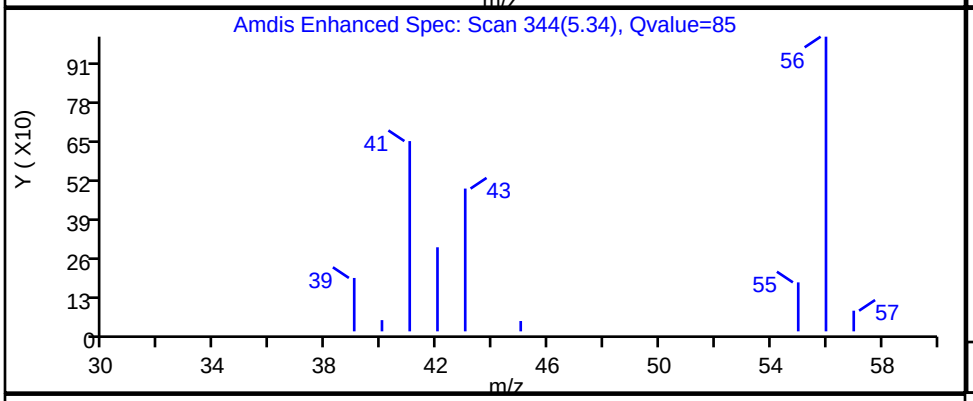
Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D		
Injection Date:	30-Apr-2019 20:05:30	Instrument ID:	A3UX12
Lims ID:	stdA9 L1		
Client ID:			
Operator ID:	001904	ALS Bottle#:	18 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

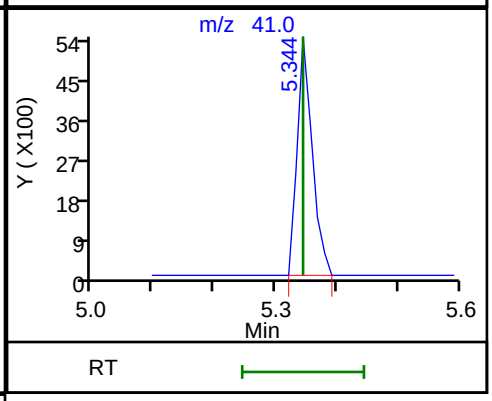
58 n-Butanol, CAS: 71-36-3

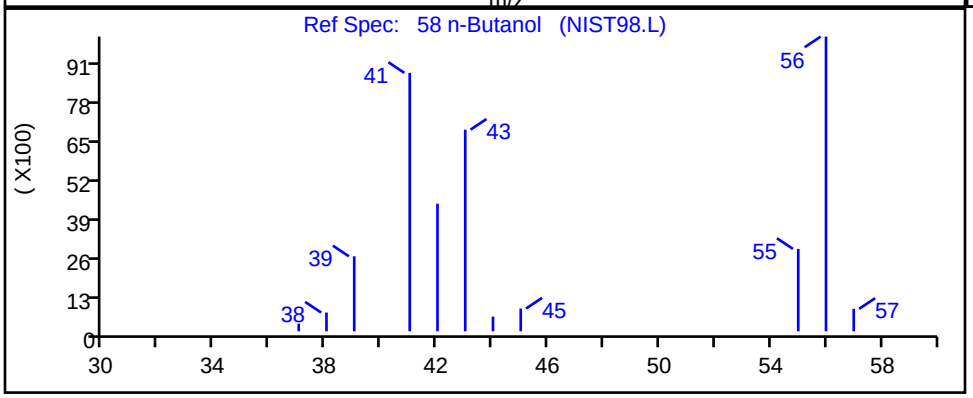
Processing Results











RT	Mass	Response	Amount
5.34	56.00	15149	6.783333
5.34	41.00	9310	

Reviewer: laveyt, 01-May-2019 13:29:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

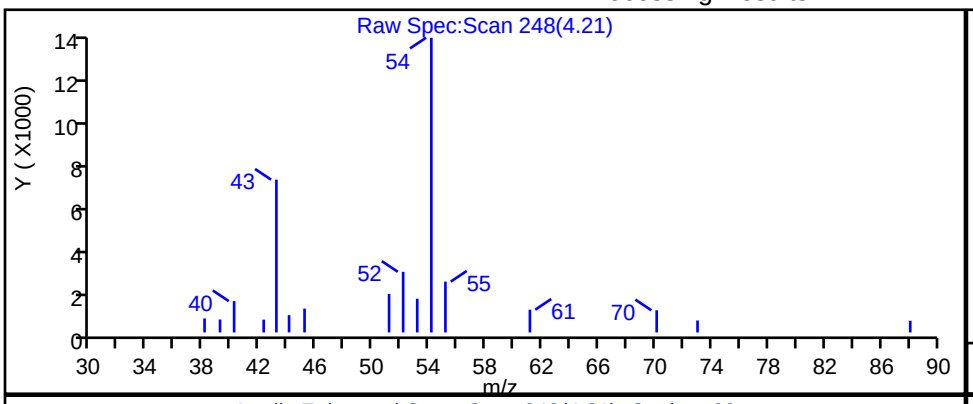
User Disabled Compound Report

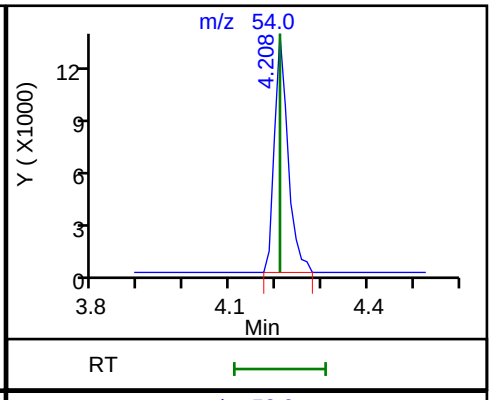
Eurofins TestAmerica, Canton

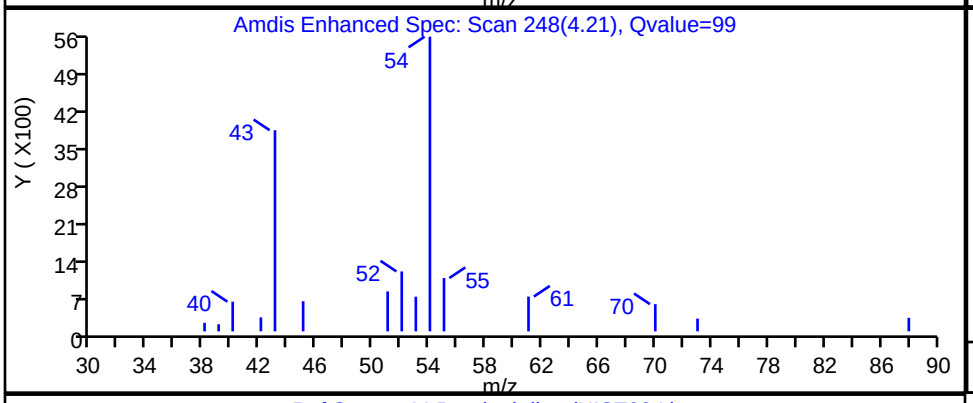
Data File:	\\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D				
Injection Date:	30-Apr-2019 20:05:30	Instrument ID:	A3UX12		
Lims ID:	stdA9 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	18	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

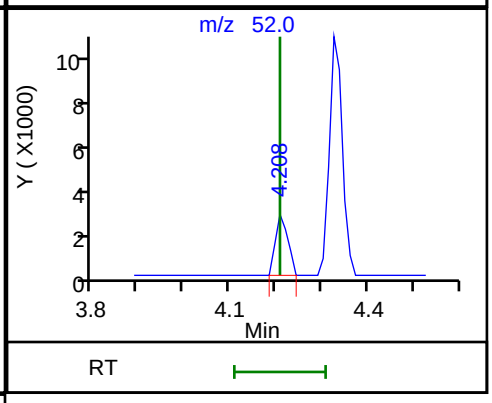
44 Propionitrile, CAS: 107-12-0

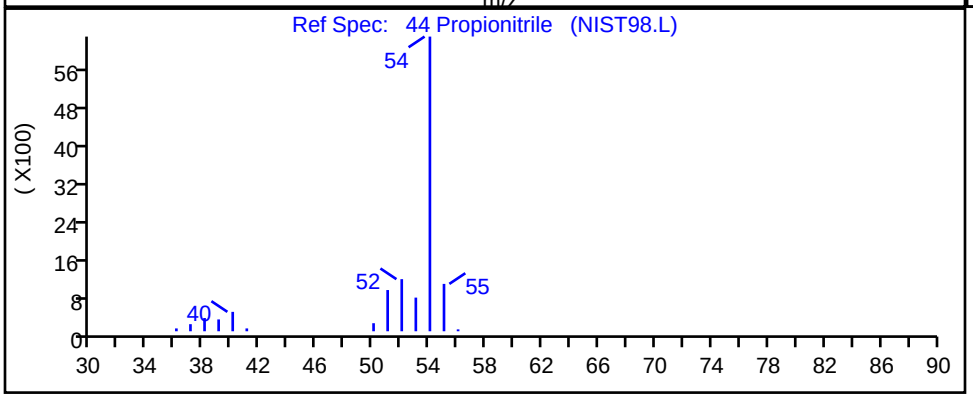
Processing Results











RT	Mass	Response	Amount
4.21	54.00	27066	2.541410
4.21	52.00	5089	

Reviewer: laveyt, 01-May-2019 13:28:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-442963/9	U1279113.D
Level 2	STD8260 240-442963/10	U1279114.D
Level 3	STD8260 240-442963/11	U1279115.D
Level 4	STD8260 240-442963/12	U1279116.D
Level 5	ICIS 240-442963/13	U1279117.D
Level 6	STD8260 240-442963/14	U1279118.D
Level 7	STD8260 240-442963/15	U1279119.D
Level 8	STD8260 240-442963/16	U1279120.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2390 0.3129	0.2536 0.3252	0.3597 0.3162	0.3422	0.3504	Ave		0.3124			0.1000	14.1		20.0			
Chloromethane	+++++ 0.4740	0.4519 0.4911	0.6754 0.4935	0.5272	0.6043	Ave		0.5311			0.1000	15.1		20.0			
Butadiene	0.3380 0.3348	0.3323 0.3375	0.4655 0.3574	0.3596	0.4197	Ave		0.3681				13.2		20.0			
Vinyl chloride	0.3197 0.3450	0.3366 0.3583	0.4557 0.3547	0.3872	0.4368	Ave		0.3743			0.1000	13.0		20.0			
Bromomethane	0.2009 0.2274	0.2172 0.2663	0.2724 0.2283	0.2866	0.2859	Ave		0.2481			0.0500	13.5		20.0			
Chloroethane	0.2176 0.2511	0.2297 0.3069	0.3005 0.2594	0.3072	0.3070	Ave		0.2724			0.0500	13.8		20.0			
Dichlorofluoromethane	0.4674 0.5232	0.5247 0.6044	0.5900 0.5160	0.6512	0.6735	Ave		0.5688				12.7		20.0			
Trichlorofluoromethane	0.3890 0.4108	0.4376 0.4705	0.4170 0.4108	0.4760	0.4898	Ave		0.4377			0.1000	8.4		20.0			
Ethyl ether	0.2445 0.3001	0.2923 0.3103	0.3107 0.2846	0.3545	0.3327	Ave		0.3037				10.8		20.0			
Acrolein	0.0233 0.0240	0.0267 0.0272	0.0311 0.0258	0.0257	0.0255	Ave		0.0262				9.1		20.0			
1,1-Dichloroethene	0.3290 0.3749	0.4147 0.4370	0.4520 0.3754	0.4141	0.4198	Ave		0.4021			0.1000	9.9		20.0			
1,1,2-Trichlorotrifluoroethane (Freon 113)	0.1703 0.2344	0.2346 0.2758	0.2511 0.2342	0.2376	0.2515	Ave		0.2362			0.0500	12.8		20.0			
Acetone	+++++ 0.1137	0.1589 0.1130	0.1529 0.0979	0.1343	0.1206	Ave		0.1273			0.0100	17.6		20.0			
Iodomethane	0.3169 0.3908	0.3792 0.4477	0.4301 0.3858	0.4683	0.4537	Ave		0.4091				12.3		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.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7494 0.7482	0.7327 0.8730	0.9202 0.7498	0.8549	0.8490	Ave		0.8097			0.1000	8.9		20.0			
3-Chloro-1-propene	0.3972 0.4081	0.4111 0.4745	0.5803 0.4084	0.4638	0.4643	Ave		0.4509				13.4		20.0			
Methyl acetate	0.2712 0.2890	0.2800 0.3141	0.3954 0.2690	0.3231	0.3105	Ave		0.3065			0.1000	13.5		20.0			
Methylene Chloride	0.3304 0.3332	0.3430 0.3813	0.4456 0.3268	0.3981	0.3811	Ave		0.3674			0.1000	11.4		20.0			
tert-Butyl alcohol	+++++ 0.0382	0.0346 0.0353	0.0469 0.0302	0.0431	0.0376	Ave		0.0380				14.7		20.0			
Acrylonitrile	0.1414 0.1448	0.1331 0.1843	0.1893 +++++	0.1631	0.1559	Ave		0.1589				13.5		20.0			
trans-1,2-Dichloroethene	0.3330 0.3645	0.3284 +++++	0.4594 +++++	0.4201	0.4101	Ave		0.3859			0.1000	13.6		20.0			
Methyl tert-butyl ether	0.7426 0.8255	0.7777 1.0920	0.9611 0.8329	0.9443	0.9124	Ave		0.8861			0.1000	12.9		20.0			
Hexane	+++++ 0.3965	0.3424 0.5392	0.4821 0.4558	0.3818	0.3948	Ave		0.4275				15.9		20.0			
1,1-Dichloroethane	0.3935 0.4613	0.4643 0.6142	0.5845 0.5312	0.5344	0.5314	Ave		0.5143			0.2000	13.9		20.0			
Vinyl acetate	+++++ 0.6655	0.5617 0.8869	0.7971 0.8155	0.6834	0.6620	Ave		0.7246				15.5		20.0			
2,2-Dichloropropane	0.3080 0.3323	0.3239 0.3895	0.3371 +++++	0.3874	0.3904	Ave		0.3526				10.0		20.0			
cis-1,2-Dichloroethene	0.3372 0.3363	0.3440 0.3862	0.3406 +++++	0.3894	0.3856	Ave		0.3599			0.1000	7.1		20.0			
2-Butanone	0.0606 0.0641	0.0495 0.0720	0.0609 +++++	0.0687	0.0660	Ave		0.0631			0.0100	11.5		20.0			
Bromochloromethane	0.2767 0.2940	0.2765 0.2741	0.3072 0.2262	0.3458	0.3405	Ave		0.2926				13.3		20.0			
Tetrahydrofuran	0.1824 0.1651	0.1442 0.1424	0.1797 0.1198	0.1690	0.1865	Ave		0.1611				14.6		20.0			
Chloroform	0.4849 0.5027	0.4932 0.4996	0.5081 0.4275	0.5601	0.5977	Ave		0.5092			0.2000	10.0		20.0			
1,1,1-Trichloroethane	0.3875 0.4270	0.3654 0.4205	0.3958 0.3615	0.3990	0.4730	Ave		0.4037			0.1000	9.0		20.0			
Cyclohexane	0.4846 0.5068	0.4997 0.4888	0.4787 0.4071	0.4338	0.5234	Ave		0.4779			0.1000	8.1		20.0			
1,1-Dichloropropene	0.4001 0.4499	0.3812 0.4152	0.4161 0.3569	0.3796	0.4876	Ave		0.4108				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.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2846 0.3536	0.3119 0.3516	0.3143 0.3065	0.3201	0.3879	Ave		0.3288			0.1000	10.1		20.0			
Isobutyl alcohol	0.0172 0.0179	0.0155 0.0146	0.0187 0.0123	0.0155	0.0174	Ave		0.0161				12.9		20.0			
Benzene	1.2306 1.2707	1.2406 1.1849	1.2643 1.0246	1.1853	1.4211	Ave		1.2278			0.5000	9.0		20.0			
1,2-Dichloroethane	0.4123 0.4133	0.3884 0.3951	0.3965 0.3400	0.3960	0.4497	Ave		0.3989			0.1000	7.7		20.0			
n-Heptane	+++++ 0.2125	0.8760 0.1889	0.3267 0.2082	0.2164	0.1882	Lin1	0.6463	0.1871				16.0			0.9910		0.9900
Trichloroethene	0.2499 0.2624	0.2675 0.2982	0.2855 0.2836	0.2842	0.2896	Ave		0.2776			0.1500	5.8		20.0			
Methylcyclohexane	0.4902 0.4469	0.5070 0.5110	0.5094 0.5191	0.4459	0.4587	Ave		0.4860			0.1000	6.3		20.0			
1,2-Dichloropropane	0.2744 0.2396	0.2459 0.2704	0.2867 0.2874	0.2595	0.2573	Ave		0.2651			0.1000	6.7		20.0			
Dibromomethane	0.1895 0.1728	0.1568 0.2250	0.1821 0.1794	0.2106	0.1896	Ave		0.1882				11.4		20.0			
1,4-Dioxane	+++++ 0.0031	+++++ 0.0038	0.0030 0.0033	0.0043	0.0032	Ave		0.0035				14.7		20.0			
Bromodichloromethane	0.3228 0.3084	0.2546 0.3976	0.3199 0.3440	0.3789	0.3236	Ave		0.3312			0.1500	13.3		20.0			
2-Chloroethyl vinyl ether	0.1829 0.1783	0.1421 0.2594	0.2002 0.2185	0.2316	0.1844	Ave		0.1997				18.2		20.0			
cis-1,3-Dichloropropene	0.3945 0.3870	0.3031 0.5372	0.4096 0.4609	0.4701	0.3950	Ave		0.4197			0.1500	16.6		20.0			
4-Methyl-2-pentanone	0.4354 0.3706	0.3274 0.4917	0.4703 0.4482	0.5361	0.3932	Ave		0.4341			0.0500	15.7		20.0			
Toluene	1.8532 1.3460	1.5321 1.8337	1.6256 1.8105	1.9267	1.3466	Ave		1.6593			0.4000	14.0		20.0			
trans-1,3-Dichloropropene	0.5866 0.4654	0.4692 0.6407	0.5203 0.6635	0.5106	0.4452	Ave		0.5377			0.1000	15.5		20.0			
Ethyl methacrylate	0.5372 0.4804	0.4744 0.6569	0.5628 0.6526	0.5119	0.4617	Ave		0.5422				14.2		20.0			
1,1,2-Trichloroethane	0.3488 0.2740	0.2971 0.3762	0.3194 0.3628	0.3084	0.3128	Ave		0.3249			0.1000	10.7		20.0			
Tetrachloroethene	0.4672 0.3443	0.3797 0.4470	0.3653 0.4319	0.3757	0.3653	Ave		0.3971			0.1500	11.3		20.0			
1,3-Dichloropropane	0.6006 0.5055	0.6082 0.6659	0.6094 0.7069	0.5690	0.6114	Ave		0.6096				9.8		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.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	+++++ 0.3462	0.3677 0.5188	0.4753 0.4590	0.4043	0.4737	Ave		0.4350			0.0500	14.6		20.0			
Dibromochloromethane	0.2607 0.3295	0.3070 0.3727	0.2990 0.3686	0.3108	0.3066	Ave		0.3194				11.6		20.0			
1,2-Dibromoethane	0.2959 0.3490	0.3468 0.3446	0.3234 0.3756	0.3251	0.3269	Ave		0.3359				7.0		20.0			
Chlorobenzene	0.9601 0.9982	0.9577 0.9856	0.9970 0.9625	0.9439	0.9561	Ave		0.9701			0.3000	2.1		20.0			
1,1,1,2-Tetrachloroethane	0.2861 0.3451	0.3082 0.3607	0.3246 0.3482	0.3416	0.3313	Ave		0.3307				7.3		20.0			
Ethylbenzene	0.4726 0.5416	0.5415 0.5535	0.5513 0.5455	0.5158	0.5401	Ave		0.5327				5.0		20.0			
m-Xylene & p-Xylene	0.5474 0.7020	0.6317 0.6953	0.6913 0.6808	0.6540	0.6759	Ave		0.6598				7.7		20.0			
o-Xylene	0.6144 0.6625	0.7873 0.6809	0.6754 0.6788	0.6652	0.6714	Ave		0.6795				7.1		20.0			
Styrene	0.8975 1.1025	1.2328 1.1300	1.0808 1.1354	1.0526	1.0955	Ave		1.0909			0.3000	8.7		20.0			
Bromoform	0.1816 0.2215	0.2061 0.2498	0.2056 0.2524	0.2241	0.2201	Ave		0.2201			0.1000	10.6		20.0			
Isopropylbenzene	1.6277 1.6644	1.8462 1.7216	1.7216 1.6924	1.6505	1.6999	Ave		1.7030			0.1000	3.9		20.0			
1,1,2,2-Tetrachloroethane	0.9256 1.0911	1.0665 0.8972	1.0273 1.1690	0.8375	0.9849	Ave		0.9999			0.3000	11.0		20.0			
Bromobenzene	0.7288 0.8081	0.8447 0.7401	0.7929 0.9282	0.6798	0.7304	Ave		0.7816				10.1		20.0			
1,2,3-Trichloropropane	0.3410 0.3591	0.3863 0.3119	0.3528 0.3774	0.2961	0.3349	Ave		0.3449				8.9		20.0			
trans-1,4-Dichloro-2-butene	0.2625 0.3469	0.2454 0.2884	0.3133 0.3529	0.2288	0.3033	Ave		0.2927				15.5		20.0			
n-Propylbenzene	0.7726 0.9340	0.8088 0.8290	0.8978 1.0055	0.7202	0.8369	Ave		0.8506				10.8		20.0			
2-Chlorotoluene	0.7922 0.7897	0.7423 0.6969	0.7641 0.8746	0.6279	0.7208	Ave		0.7510				9.8		20.0			
1,3,5-Trimethylbenzene	2.0962 2.7331	2.3810 2.3653	2.6027 2.9725	2.4185	2.4938	Ave		2.5079				10.5		20.0			
4-Chlorotoluene	0.7751 0.7961	0.7602 0.7135	0.7756 0.8974	0.7258	0.7198	Ave		0.7704				7.7		20.0			
tert-Butylbenzene	2.0911 2.3706	2.1569 2.0531	2.1523 2.5782	2.0837	2.0767	Ave		2.1953				8.4		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.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.6633 2.7829	2.4414 2.3659	2.6580 3.0077	2.6472	2.5064	Ave		2.6341				7.7		20.0			
sec-Butylbenzene	3.2857 3.3989	3.1011 3.2856	3.1609 3.2757	2.9618	3.0028	Ave		3.1841				4.8		20.0			
1,3-Dichlorobenzene	1.5139 1.5056	1.5517 1.4537	1.4912 1.4993	1.4677	1.3852	Ave		1.4835			0.6000	3.3		20.0			
p-Isopropyltoluene	2.3317 2.8989	2.5270 2.8114	2.7243 2.8068	2.5023	2.5803	Ave		2.6478				7.3		20.0			
1,4-Dichlorobenzene	1.7142 1.5352	1.6156 1.5115	1.5056 1.5195	1.4720	1.4203	Ave		1.5367			0.5000	5.9		20.0			
n-Butylbenzene	1.8951 2.4602	2.1133 2.4171	2.2733 2.3109	2.0729	2.2184	Ave		2.2202				8.4		20.0			
1,2-Dichlorobenzene	1.5372 1.4905	1.4933 1.4585	1.4947 1.4453	1.4331	1.4279	Ave		1.4726			0.4000	2.6		20.0			
1,2-Dibromo-3-Chloropropane	0.2010 0.2669	0.2345 0.2367	0.2385 0.2646	0.2131	0.2135	Ave		0.2336			0.0500	10.2		20.0			
1,2,4-Trichlorobenzene	0.9887 0.8713	0.8099 0.7417	0.8058 0.8636	0.7082	0.6997	Ave		0.8111			0.2000	12.0		20.0			
Hexachlorobutadiene	0.4276 0.3159	0.3357 0.2828	0.2887 0.3236	0.2492	0.2598	Ave		0.3104				18.1		20.0			
Naphthalene	2.7351 3.0748	2.6527 2.5138	2.8063 2.9241	2.3872	2.3949	Ave		2.6861				9.2		20.0			
1,2,3-Trichlorobenzene	0.8366 0.8012	0.7261 0.6950	0.7707 0.8318	0.6662	0.6501	Ave		0.7472				9.8		20.0			
Dibromofluoromethane (Surr)	+++++ 0.2687	+++++ 0.2632	0.2565 0.2279	0.2654	0.3110	Ave		0.2655				10.1		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3299	+++++ 0.3169	0.3337 0.2741	0.3228	0.3720	Ave		0.3249				9.7		20.0			
Toluene-d8 (Surr)	+++++ 1.1036	+++++ 1.5400	1.3670 1.5066	1.4506	1.1486	Ave		1.3527				13.7		20.0			
4-Bromofluorobenzene (Surr)	+++++ 0.4348	+++++ 0.4579	0.4861 0.5021	0.4378	0.4603	Ave		0.4632				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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-442963/9	U1279113.D
Level 2	STD8260 240-442963/10	U1279114.D
Level 3	STD8260 240-442963/11	U1279115.D
Level 4	STD8260 240-442963/12	U1279116.D
Level 5	ICIS 240-442963/13	U1279117.D
Level 6	STD8260 240-442963/14	U1279118.D
Level 7	STD8260 240-442963/15	U1279119.D
Level 8	STD8260 240-442963/16	U1279120.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	6491 692065	12858 952192	95890 1447911	151666	325891	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Chloromethane	FB	Ave	+++++ 1048531	22907 1437896	180045 2259568	233672	562073	+++++ 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Butadiene	FB	Ave	9181 740602	16845 988134	124092 1636623	159384	390394	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Vinyl chloride	FB	Ave	8683 763156	17064 1049031	121481 1624267	171618	406302	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Bromomethane	FB	Ave	5457 502951	11010 779653	72628 1045526	127041	265909	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Chloroethane	FB	Ave	5911 555402	11645 898507	80121 1187806	136173	285493	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Dichlorofluoromethane	FB	Ave	12695 1157160	26597 1769403	157289 2362624	288627	626381	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Trichlorofluoromethane	FB	Ave	10566 908548	22183 1377516	111171 1880748	210999	455578	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Ethyl ether	FB	Ave	6641 663810	14820 908584	82827 1303305	157156	309400	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Acrolein	FB	Ave	3163 265086	6778 397800	41496 590629	56998	118799	2.50 200	5.00 300	25.0 400	50.0	100
1,1-Dichloroethene	FB	Ave	8937 829316	21022 1279374	120487 1718675	183544	390469	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	FB	Ave	4626 518516	11895 807578	66947 1072209	105296	233909	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Acetone	FB	Ave	+++++ 503096	16108 661546	81521 896587	119029	224375	+++++ 80.0	2.00 120	10.0 160	20.0	40.0
Iodomethane	FB	Ave	8607 864362	19223 1310816	114665 1766617	207558	421954	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Carbon disulfide	FB	Ave	20354 1654881	37146 2555816	245305 3433316	378954	789675	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	10788 902635	20839 1389182	154691 1869760	205590	431804	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Methyl acetate	FB	Ave	14733 1278569	28394 1839288	210795 2463274	286458	577598	1.00 80.0	2.00 120	10.0 160	20.0	40.0
Methylene Chloride	FB	Ave	8975 737052	17390 1116320	118801 1496408	176439	354472	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
tert-Butyl alcohol	FB	Ave	+++++ 844343	17528 1032059	125121 1383065	191199	349742	+++++ 400	10.0 600	50.0 800	100	200
Acrylonitrile	FB	Ave	38417 3202437	67455 5396310	504697 +++++	723158	1450393	5.00 400	10.0 600	50.0 +++++	100	200
trans-1,2-Dichloroethene	FB	Ave	9045 806228	16647 +++++	122478 +++++	186220	381398	0.500 40.0	1.00 +++++	5.00 +++++	10.0	20.0
Methyl tert-butyl ether	FB	Ave	20171 1825802	39426 3196991	256224 3813820	418565	848635	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Hexane	FB	Ave	+++++ 877095	17358 1578677	128512 2087141	169215	367216	+++++ 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1-Dichloroethane	FB	Ave	10688 1020403	23537 1798158	155829 2432150	236866	494235	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Vinyl acetate	FB	Ave	+++++ 1471981	28476 2596721	212513 3734074	302914	615701	+++++ 40.0	1.00 60.0	5.00 80.0	10.0	20.0
2,2-Dichloropropane	FB	Ave	8366 734903	16418 1140347	89862 +++++	171711	363126	0.500 40.0	1.00 60.0	5.00 +++++	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	9160 743747	17440 1130637	90791 +++++	172589	358669	0.500 40.0	1.00 60.0	5.00 +++++	10.0	20.0
2-Butanone	FB	Ave	3292 283584	5020 421345	32487 +++++	60927	122791	1.00 80.0	2.00 120	10.0 +++++	20.0	40.0
Bromochloromethane	FB	Ave	7517 650336	14016 802370	81886 1035588	153287	316652	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Tetrahydrofuran	FB	Ave	9909 730197	14616 833693	95835 1096878	149777	347004	1.00 80.0	2.00 120	10.0 160	20.0	40.0
Chloroform	FB	Ave	13172 1111892	25004 1462582	135443 1957485	248247	555952	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	10524 944576	18522 1231118	105527 1655131	176862	439960	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Cyclohexane	FB	Ave	13162 1121049	25331 1431075	127620 1863865	192287	486792	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1-Dichloropropene	FB	Ave	10867 995105	19325 1215722	110916 1634304	168265	453544	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Carbon tetrachloride	FB	Ave	7731 782108	15810 1029542	83787 1403246	141890	360797	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Isobutyl alcohol	FB	Ave	11663 989777	19594 1065136	124596 1406970	172245	405480	12.5 1000	25.0 1500	125 2000	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	33425 2810699	62890 3469151	337044 4691183	525396	1321740	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2-Dichloroethane	FB	Ave	11198 914197	19689 1156634	105694 1556959	175519	418240	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
n-Heptane	FB	Lin1	+++++ 470133	44411 552977	87098 953448	95900	175083	+++++ 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Trichloroethene	FB	Ave	6788 580360	13562 873131	76118 1298374	125955	269336	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Methylcyclohexane	FB	Ave	13314 988563	25703 1496196	135793 2376794	197666	426646	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2-Dichloropropane	FB	Ave	7452 529883	12467 791730	76423 1315984	115005	239320	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Dibromomethane	FB	Ave	5148 382258	7950 658845	48536 821478	93337	176342	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 136471	+++++ 224221	15971 304656	38163	59715	+++++ 800	+++++ 1200	100 1600	200	400
Bromodichloromethane	FB	Ave	8768 682191	12908 1164000	85277 1575297	167964	300932	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	9938 788544	14412 1519041	106727 2001081	205324	343008	1.00 80.0	2.00 120	10.0 160	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	10714 856087	15367 1572803	109191 2110296	208362	367344	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	23654 1639242	33198 2878867	250773 4104472	475232	731356	1.00 80.0	2.00 120	10.0 160	20.0	40.0
Toluene	CBNZ d5	Ave	29652 2206110	46282 3857470	302953 5188385	609655	1007024	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	9385 762783	14175 1347764	96966 1901312	161548	332918	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	8596 787358	14331 1381887	104880 1870176	161989	345274	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	5581 449059	8974 791429	59524 1039659	97580	233957	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	7475 564371	11469 940315	68082 1237632	118877	273224	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	9610 828517	18373 1400884	113574 2025809	180029	457272	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
2-Hexanone	CBNZ d5	Ave	+++++ 1134947	22216 2182766	177166 2630745	255826	708445	+++++ 80.0	2.00 120	10.0 160	20.0	40.0
Dibromochloromethane	CBNZ d5	Ave	4171 540110	9274 784117	55714 1056327	98356	229325	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2-Dibromoethane	CBNZ d5	Ave	4735 572080	10477 724976	60273 1076276	102871	244506	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	15362 1635971	28930 2073291	185806 2758216	298670	715039	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4578 565680	9310 758714	60497 997800	108087	247781	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	7562 887653	16358 1164276	102746 1563228	163196	403913	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	8759 1150536	19083 1462696	128823 1951120	206929	505494	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
o-Xylene	CBNZ d5	Ave	9831 1085881	23782 1432342	125874 1945281	210472	502115	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Styrene	CBNZ d5	Ave	14361 1807037	37239 2377113	201429 3253865	333048	819248	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Bromoform	CBNZ d5	Ave	2906 363030	6225 525428	38309 723239	70911	164608	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	26044 2727885	55771 3621536	320834 4849848	522254	1271237	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	7751 843951	19529 1087689	98841 1682800	164980	394582	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Bromobenzene	DCBd 4	Ave	6103 625073	15468 897214	76292 1336195	133920	292641	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	2856 277742	7073 378143	33941 543257	58331	134177	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2198 268293	4494 349603	30147 508069	45074	121536	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
n-Propylbenzene	DCBd 4	Ave	6470 722462	14811 1004987	86386 1447539	141874	335308	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	6634 610825	13592 844827	73516 1259021	123687	288795	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	17554 2114062	43601 2867428	250416 4279171	476426	999122	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	6491 615770	13920 864927	74622 1291849	142976	288403	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	17511 1833625	39497 2488936	207081 3711556	410479	832037	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	22303 2152543	44707 2868200	255743 4329767	521486	1004174	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	27515 2628984	56787 3983089	304124 4715586	583446	1203086	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	12678 1164577	28415 1762350	143474 2158288	289123	554995	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
p-Isopropyltoluene	DCBd 4	Ave	19526 2242296	46274 3408231	262116 4040650	492942	1033800	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	14355 1187495	29584 1832355	144861 2187419	289977	569022	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	15870 1902978	38698 2930188	218725 3326661	408355	888801	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	12873 1152915	27344 1768141	143813 2080580	282319	572071	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1683 206406	4295 286949	22950 380957	41982	85539	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8280 673976	14830 899204	77534 1243231	139512	280319	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	3581 244373	6148 342826	27773 465852	49088	104077	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Naphthalene	DCBd 4	Ave	22904 2378356	48575 3047517	270015 4209448	470264	959515	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7006 619750	13296 842599	74152 1197429	131236	260445	0.500 40.0	1.00 60.0	5.00 80.0	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 594419	+++++ 770621	68389 1043625	117634	289228	+++++ 40.0	+++++ 60.0	5.00 80.0	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 729798	+++++ 927672	88950 1255009	143083	345986	+++++ 40.0	+++++ 60.0	5.00 80.0	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 1808749	+++++ 3239682	254761 4317396	458994	858996	+++++ 40.0	+++++ 60.0	5.00 80.0	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 712692	+++++ 963194	90585 1438809	138527	344224	+++++ 40.0	+++++ 60.0	5.00 80.0	10.0	20.0

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.: 240-134931-1 Analy Batch No.: 442963

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2020 17:43 Calibration End Date: 07/16/2020 20:20 Calibration ID: 57831

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-442963/9	U1279113.D
Level 2	STD8260 240-442963/10	U1279114.D
Level 3	STD8260 240-442963/11	U1279115.D
Level 4	STD8260 240-442963/12	U1279116.D
Level 5	ICIS 240-442963/13	U1279117.D
Level 6	STD8260 240-442963/14	U1279118.D
Level 7	STD8260 240-442963/15	U1279119.D
Level 8	STD8260 240-442963/16	U1279120.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
n-Heptane	+++++	22.8						50				

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Jul-2020 17:43:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-009
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:23:41 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 18:10:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	98	1086472	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	86	640010	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	334969	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111		4.539				ND	ND	U
$ 5 1,2-Dichloroethane-d4 (Surr)	65		4.823				ND	ND	U
$ 6 Toluene-d8 (Surr)	98		6.456				ND	ND	U
$ 7 4-Bromofluorobenzene (Surr)	95		8.858				ND	ND	U
9 Dichlorodifluoromethane	85	1.392	1.403	-0.011	95	6491	0.5000	0.3825	
10 Chloromethane	50		1.605				ND	ND	U
11 Butadiene	54	1.640	1.652	-0.012	86	9181	0.5000	0.4591	
12 Vinyl chloride	62	1.687	1.687	0.000	94	8683	0.5000	0.4271	
14 Bromomethane	94	1.948	1.936	0.012	78	5457	0.5000	0.4048	
15 Chloroethane	64	1.983	1.995	-0.012	93	5911	0.5000	0.3994	
16 Dichlorofluoromethane	67	2.173	2.184	-0.011	94	12695	0.5000	0.4109	
17 Trichlorofluoromethane	101	2.173	2.184	-0.011	87	10566	0.5000	0.4444	
19 Ethyl ether	59	2.433	2.445	-0.012	91	6641	0.5000	0.4025	
20 Acrolein	56	2.551	2.563	-0.012	96	3163	2.50	2.22	
21 1,1-Dichloroethene	61	2.622	2.634	-0.012	94	8937	0.5000	0.4091	
22 112TCTFE	101	2.670	2.670	0.000	85	4626	0.5000	0.3605	
23 Acetone	43		2.693				ND	ND	U
24 Iodomethane	142	2.764	2.776	-0.012	95	8607	0.5000	0.3873	
25 Carbon disulfide	76	2.812	2.823	-0.011	99	20354	0.5000	0.4628	
27 3-Chloro-1-propene	41	2.942	2.954	-0.012	89	10788	0.5000	0.4404	
28 Methyl acetate	43	2.965	2.977	-0.012	96	14733	1.00	0.8847	
29 Methylene Chloride	49	3.048	3.060	-0.012	86	8975	0.5000	0.4496	
30 2-Methyl-2-propanol	59		3.167				ND	ND	U
31 Acrylonitrile	53	3.273	3.285	-0.012	99	38417	5.00	4.45	
32 trans-1,2-Dichloroethene	61	3.285	3.297	-0.012	67	9045	0.5000	0.4314	
33 Methyl tert-butyl ether	73	3.285	3.297	-0.012	95	20171	0.5000	0.4191	
34 Hexane	57		3.522				ND	ND	U
35 1,1-Dichloroethane	63	3.640	3.652	-0.012	92	10688	0.5000	0.3825	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43		3.699				ND	ND	U
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	80	9160	0.5000	0.4685	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	58	8366	0.5000	0.4367	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	3292	1.00	0.9601	
46 Chlorobromomethane	49	4.326	4.338	-0.012	96	7517	0.5000	0.4729	
47 Tetrahydrofuran	42	4.373	4.374	-0.001	91	9909	1.00	1.13	
48 Chloroform	83	4.397	4.409	-0.012	94	13172	0.5000	0.4762	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	95	10524	0.5000	0.4799	
50 Cyclohexane	84	4.598	4.598	0.000	89	13162	0.5000	0.5070	
51 1,1-Dichloropropene	75	4.681	4.693	-0.012	92	10867	0.5000	0.4869	
52 Carbon tetrachloride	117	4.693	4.693	0.000	74	7731	0.5000	0.4328	
53 Isobutyl alcohol	41	4.788	4.788	0.000	93	11663	12.5	13.3	
54 Benzene	78	4.859	4.870	-0.011	96	33425	0.5000	0.5012	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	95	11198	0.5000	0.5168	
57 n-Heptane	57		5.083				ND	ND	U
59 Trichloroethene	130	5.403	5.403	0.000	94	6788	0.5000	0.4501	
61 Methylcyclohexane	83	5.569	5.569	0.000	86	13314	0.5000	0.5043	
62 1,2-Dichloropropane	63	5.592	5.604	-0.012	93	7452	0.5000	0.5174	
65 1,4-Dioxane	88		5.711				ND	ND	U
64 Dibromomethane	174	5.699	5.711	-0.012	96	5148	0.5000	0.5035	
66 Dichlorobromomethane	83	5.829	5.829	0.000	95	8768	0.5000	0.4873	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	9938	1.00	0.9162	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	10714	0.5000	0.4700	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	95	23654	1.00	1.00	
71 Toluene	91	6.503	6.515	-0.012	99	29652	0.5000	0.5584	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	92	9385	0.5000	0.5455	
74 Ethyl methacrylate	69	6.776	6.776	0.000	86	8596	0.5000	0.4954	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	86	5581	0.5000	0.5367	
76 Tetrachloroethene	166	7.000	7.000	0.000	91	7475	0.5000	0.5883	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	92	9610	0.5000	0.4926	
78 2-Hexanone	43		7.095				ND	ND	U
80 Chlorodibromomethane	129	7.225	7.225	0.000	85	4171	0.5000	0.4081	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	4735	0.5000	0.4405	
83 Chlorobenzene	112	7.781	7.781	0.000	96	15362	0.5000	0.4948	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	86	4578	0.5000	0.4326	
85 Ethylbenzene	106	7.876	7.876	0.000	98	7562	0.5000	0.4436	
86 m-Xylene & p-Xylene	106	7.982	7.983	-0.001	98	8759	0.5000	0.4148	
87 o-Xylene	106	8.361	8.361	0.000	95	9831	0.5000	0.4521	
88 Styrene	104	8.373	8.373	0.000	94	14361	0.5000	0.4114	
89 Bromoform	173	8.550	8.551	-0.001	90	2906	0.5000	0.4125	
90 Isopropylbenzene	105	8.704	8.704	0.000	94	26044	0.5000	0.4779	
92 Bromobenzene	156	9.000	9.000	0.000	88	6103	0.5000	0.4662	
93 1,1,2,2-Tetrachloroethane	83	8.988	9.000	-0.012	85	7751	0.5000	0.4628	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	81	2856	0.5000	0.4944	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.048	-0.001	70	2198	0.5000	0.4484	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	6470	0.5000	0.4541	
97 2-Chlorotoluene	126	9.178	9.178	0.000	96	6634	0.5000	0.5274	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	17554	0.5000	0.4179	
99 4-Chlorotoluene	126	9.284	9.284	0.000	97	6491	0.5000	0.5030	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	17511	0.5000	0.4763	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	22303	0.5000	0.5055	
105 sec-Butylbenzene	105	9.793	9.793	0.000	93	27515	0.5000	0.5160	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	96	12678	0.5000	0.5102	
107 4-Isopropyltoluene	119	9.935	9.947	-0.012	95	19526	0.5000	0.4403	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	14355	0.5000	0.5577	
111 n-Butylbenzene	91	10.337	10.337	0.000	96	15870	0.5000	0.4268	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	95	12873	0.5000	0.5220	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	78	1683	0.5000	0.4302	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	-0.001	87	8280	0.5000	0.6095	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	83	3581	0.5000	0.6888	
117 Naphthalene	128	12.195	12.195	0.000	95	22904	0.5000	0.5091	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	92	7006	0.5000	0.5598	
S 124 Trihalomethanes, Total	1				0		2.00	1.78	
S 125 Total BTEX	1				0		2.50	2.37	
S 126 1,2-Dichloroethene, Total	96				0			0.9000	
S 127 1,3-Dichloropropene, Total	75				0			1.02	
S 128 Xylenes, Total	106				0		1.00	0.8670	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	0.40	Units: uL
vmarolistdw_00352	Amount Added:	0.40	Units: uL
vmrprimw_00394	Amount Added:	0.40	Units: uL
vm50ss_00410	Amount Added:	0.40	Units: uL

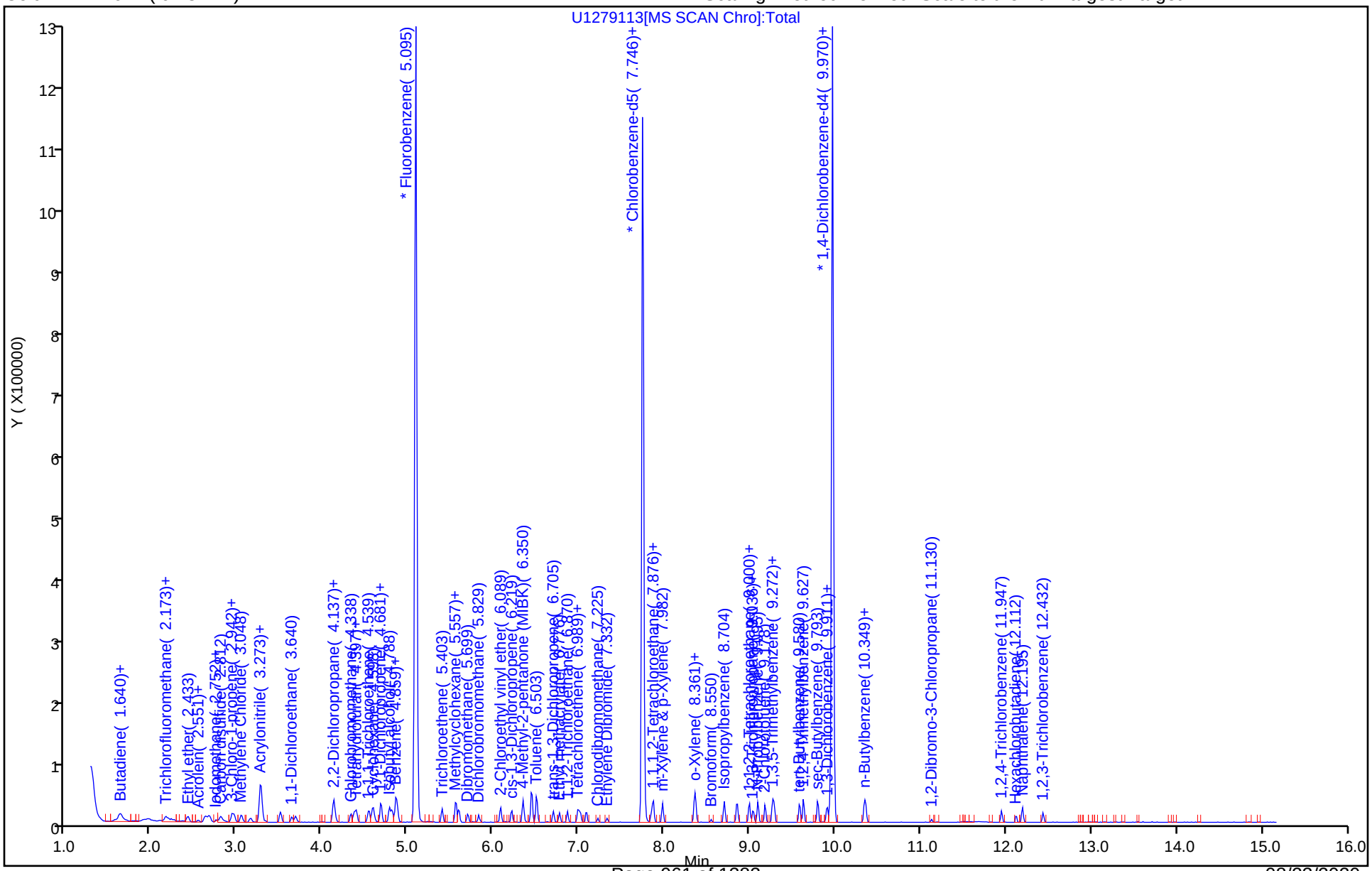
Report Date: 16-Jul-2020 21:23:44 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D

Injection Date:	16-Jul-2020 17:43:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

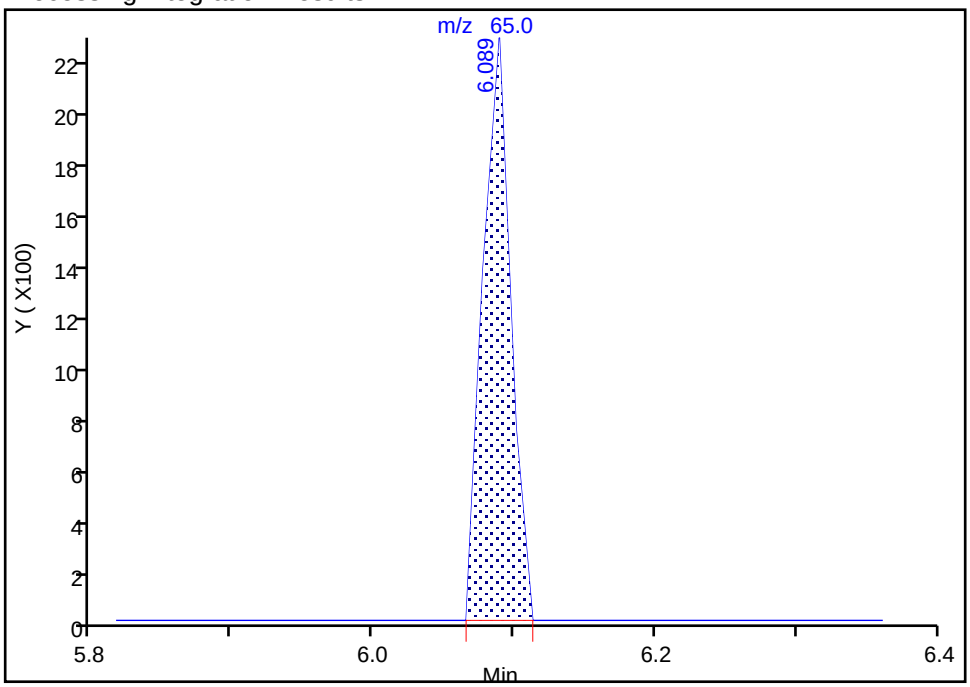
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

68 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 2

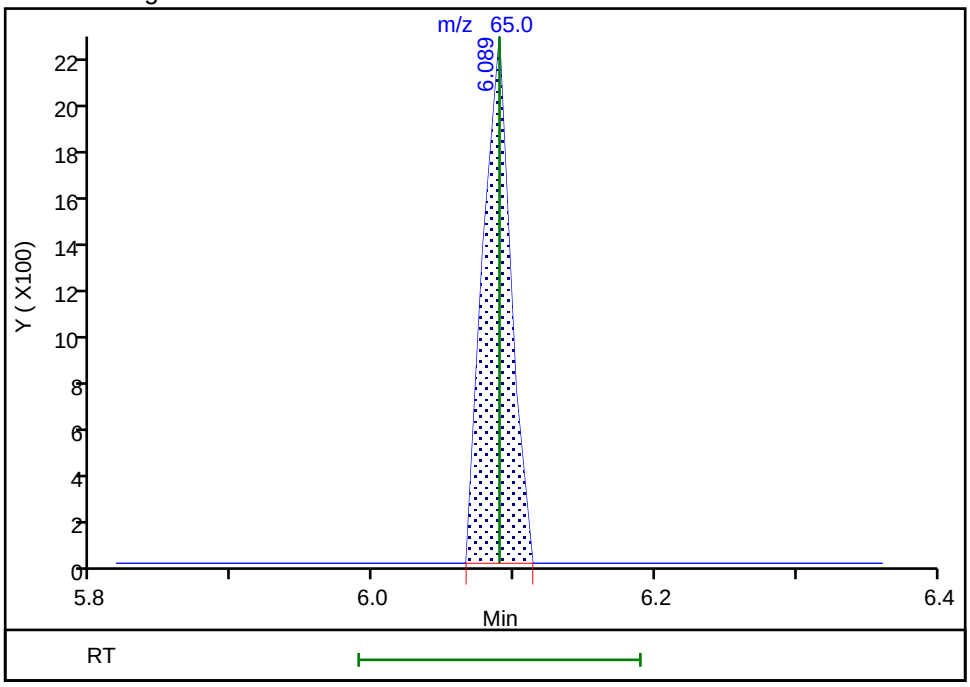
Processing Integration Results

RT: 6.09
Area: 3022
Amount: 0.928679
Amount Units: ug/l



Manual Integration Results

RT: 6.09
Area: 3022
Amount: 0.916162
Amount Units: ug/l



Reviewer: laveyt, 16-Jul-2020 20:34:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

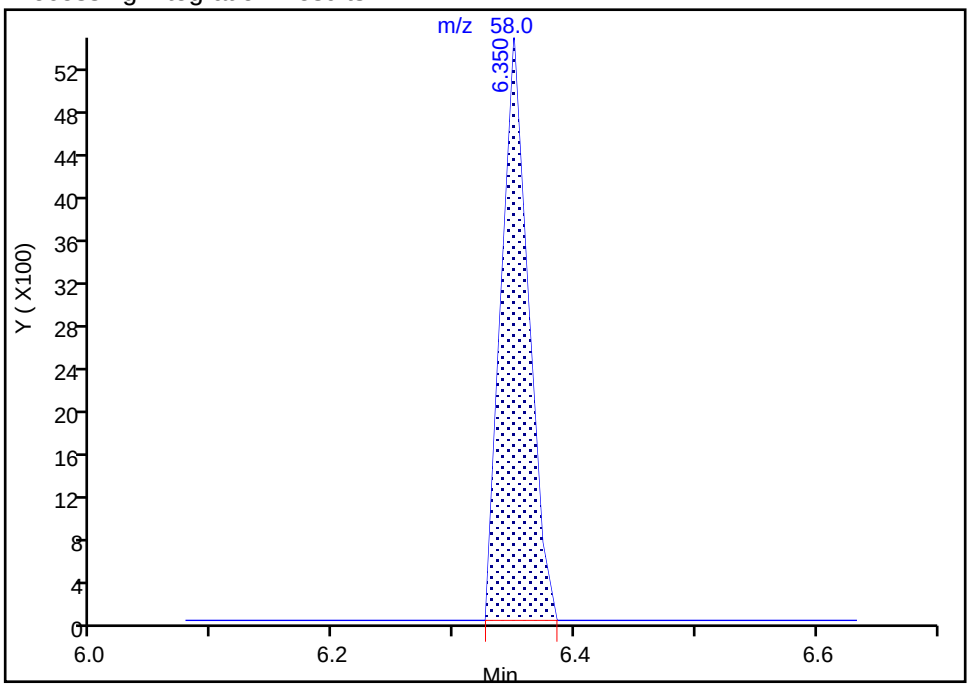
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

70 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 2

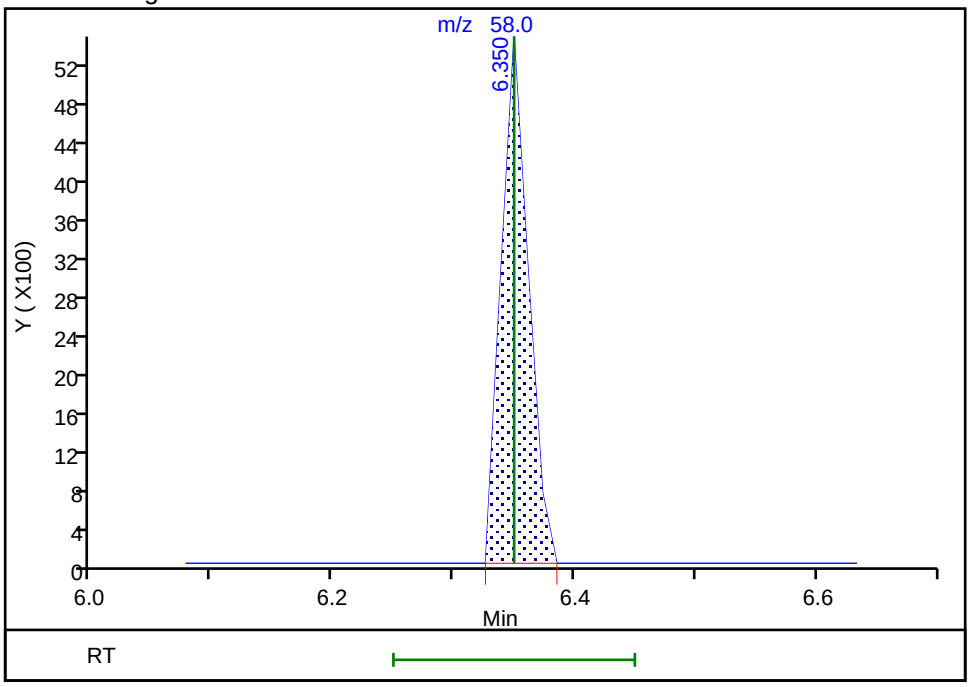
Processing Integration Results

RT: 6.35
Area: 8536
Amount: 1.007725
Amount Units: ug/l



Manual Integration Results

RT: 6.35
Area: 8536
Amount: 1.003046
Amount Units: ug/l



Reviewer: laveyt, 16-Jul-2020 20:54:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

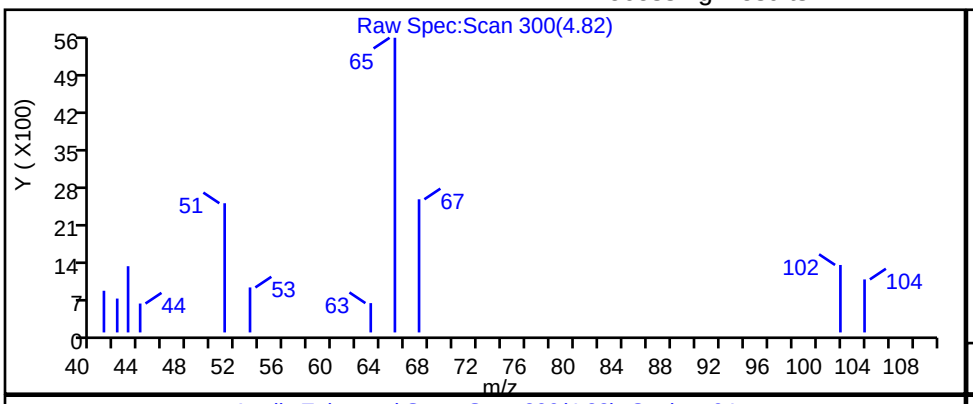
User Disabled Compound Report

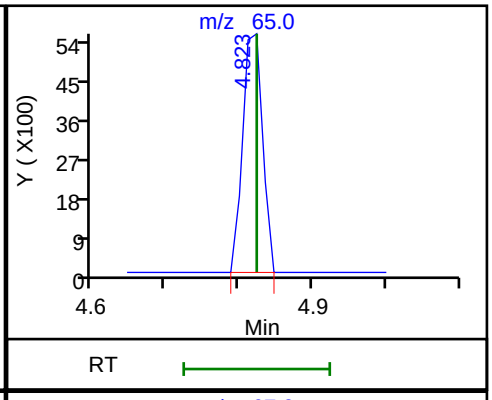
Eurofins TestAmerica, Canton

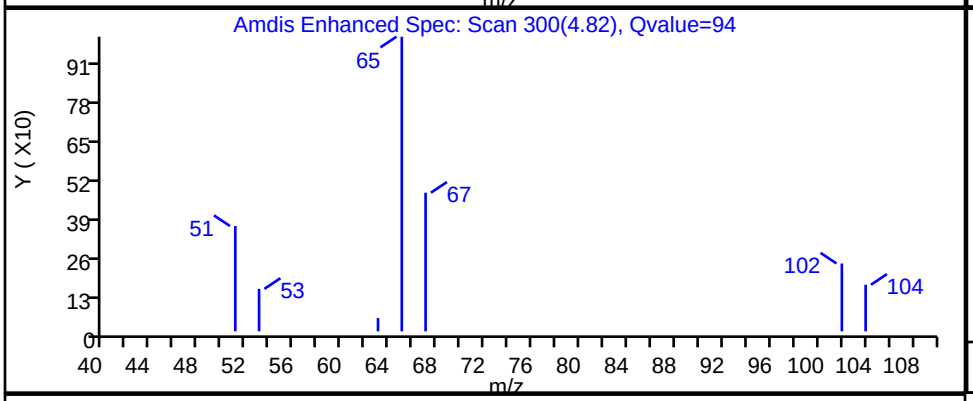
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

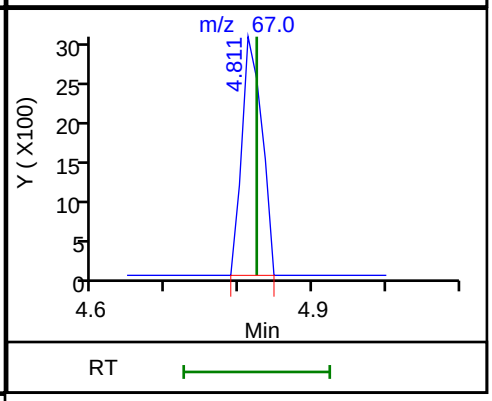
$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

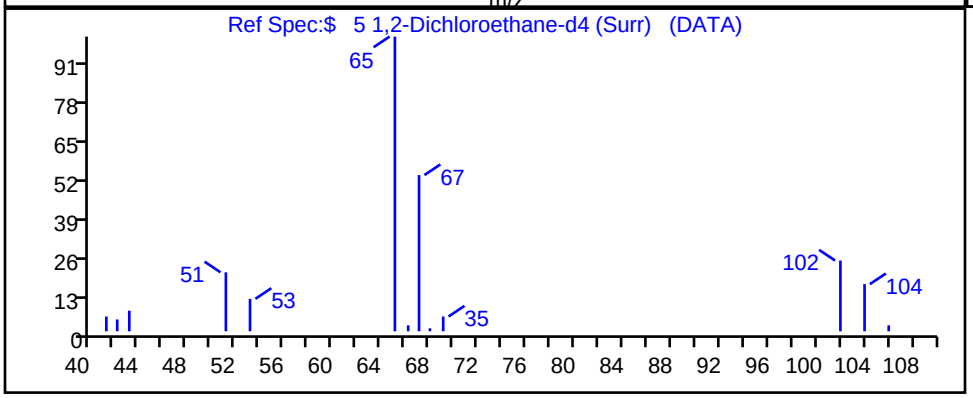
Processing Results











RT	Mass	Response	Amount
4.82	65.00	10451	0.548781
4.81	67.00	5764	

Reviewer: laveyt, 16-Jul-2020 20:28:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

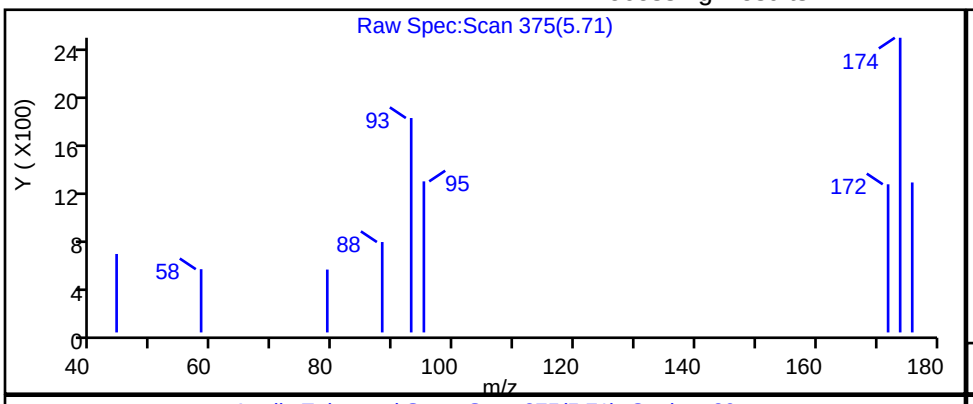
User Disabled Compound Report

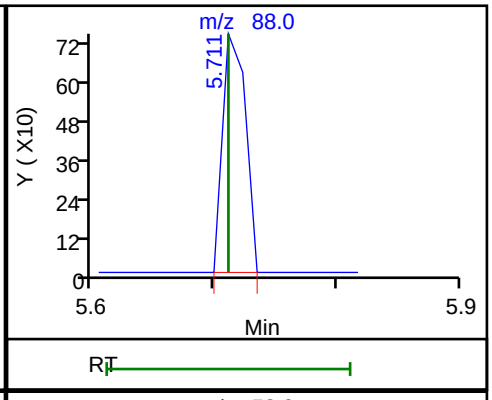
Eurofins TestAmerica, Canton

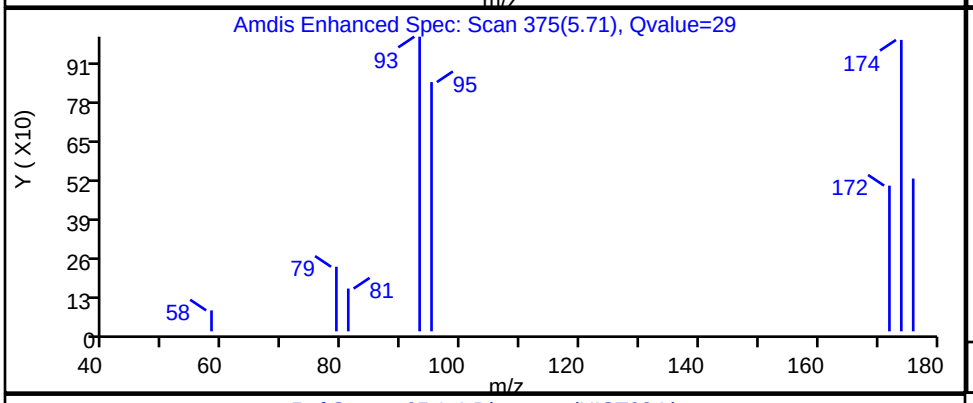
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

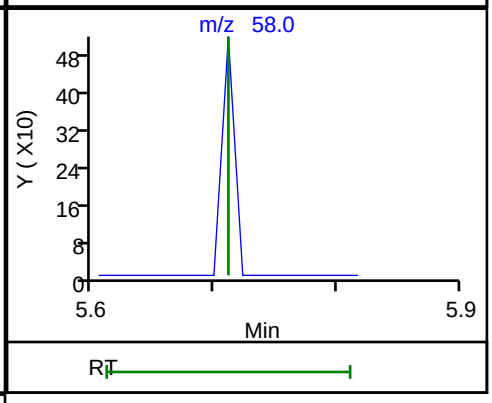
65 1,4-Dioxane, CAS: 123-91-1

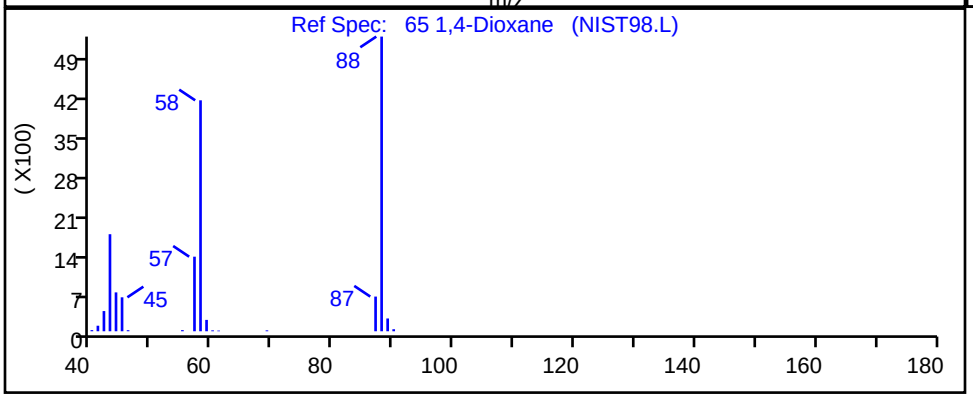
Processing Results











RT	Mass	Response	Amount
5.71	88.00	968	6.093216
5.71	58.00	0	

Reviewer: laveyt, 16-Jul-2020 20:33:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

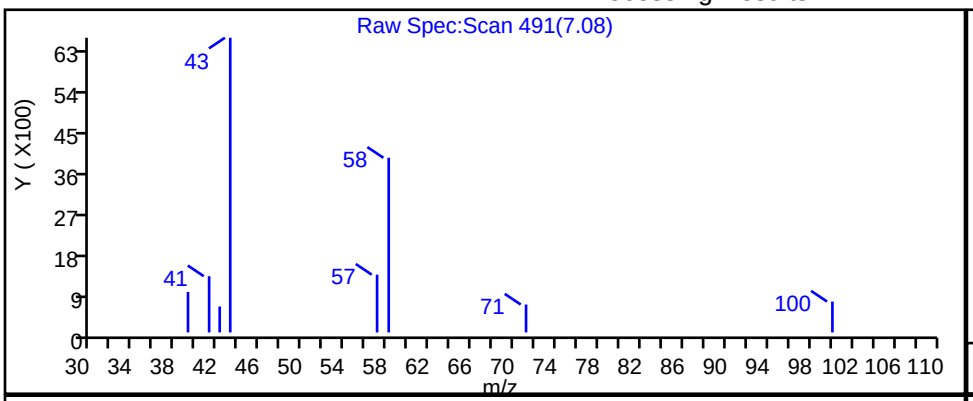
User Disabled Compound Report

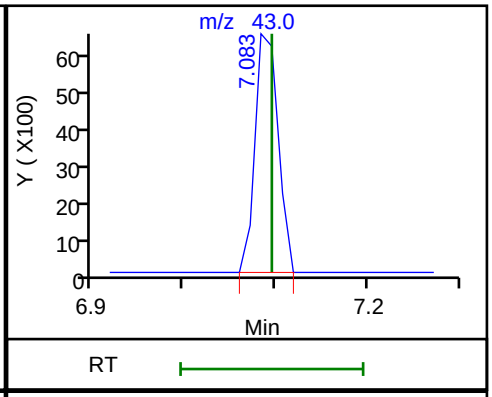
Eurofins TestAmerica, Canton

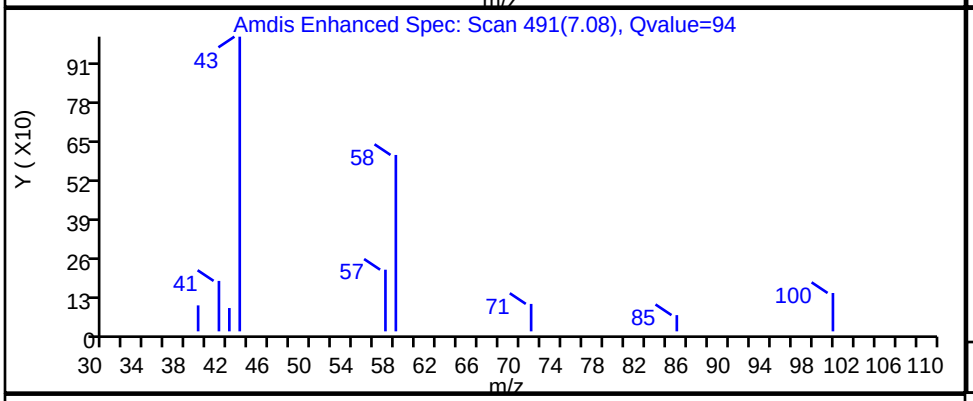
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

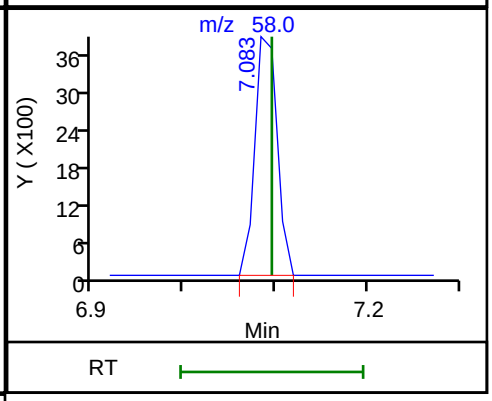
78 2-Hexanone, CAS: 591-78-6

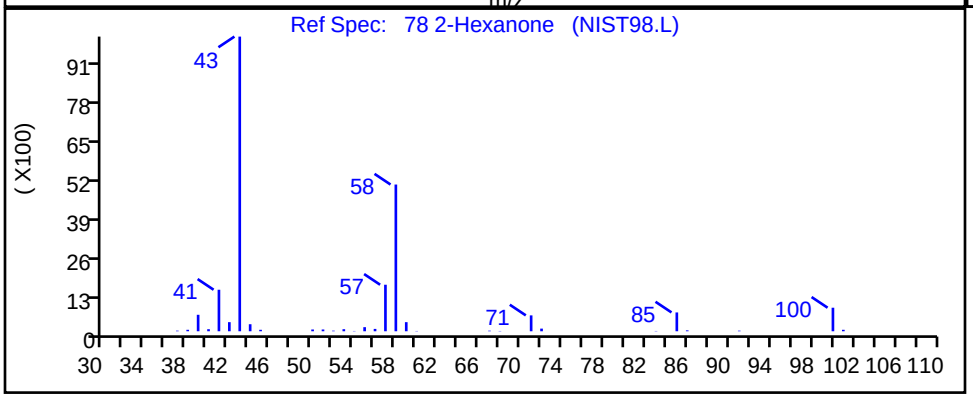
Processing Results











RT	Mass	Response	Amount
7.08	43.00	11432	0.849644
7.08	58.00	6539	

Reviewer: laveyt, 16-Jul-2020 20:55:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

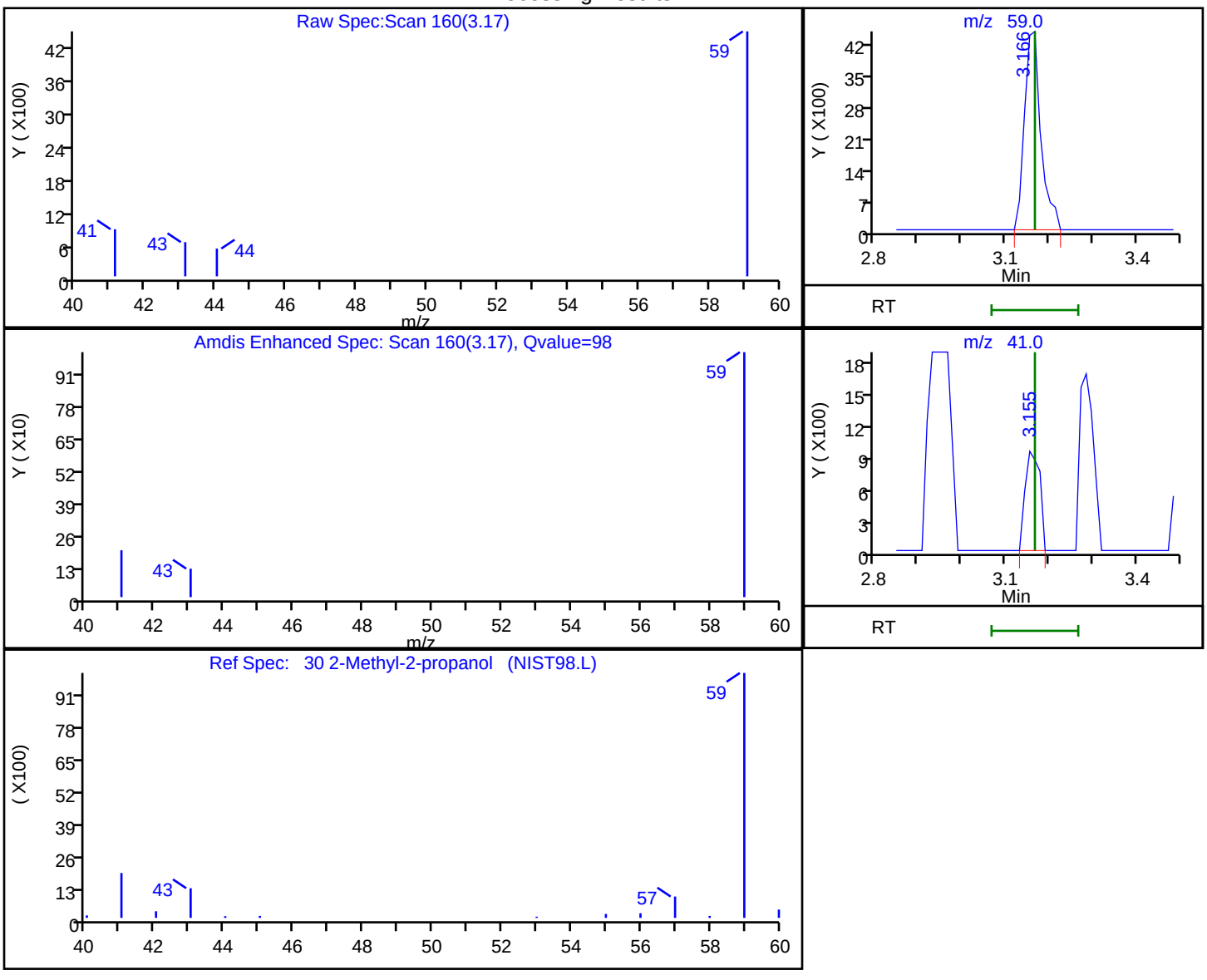
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

30 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results



RT	Mass	Response	Amount
3.17	59.00	11702	5.577747
3.15	41.00	2196	

Reviewer: laveyt, 16-Jul-2020 21:11:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

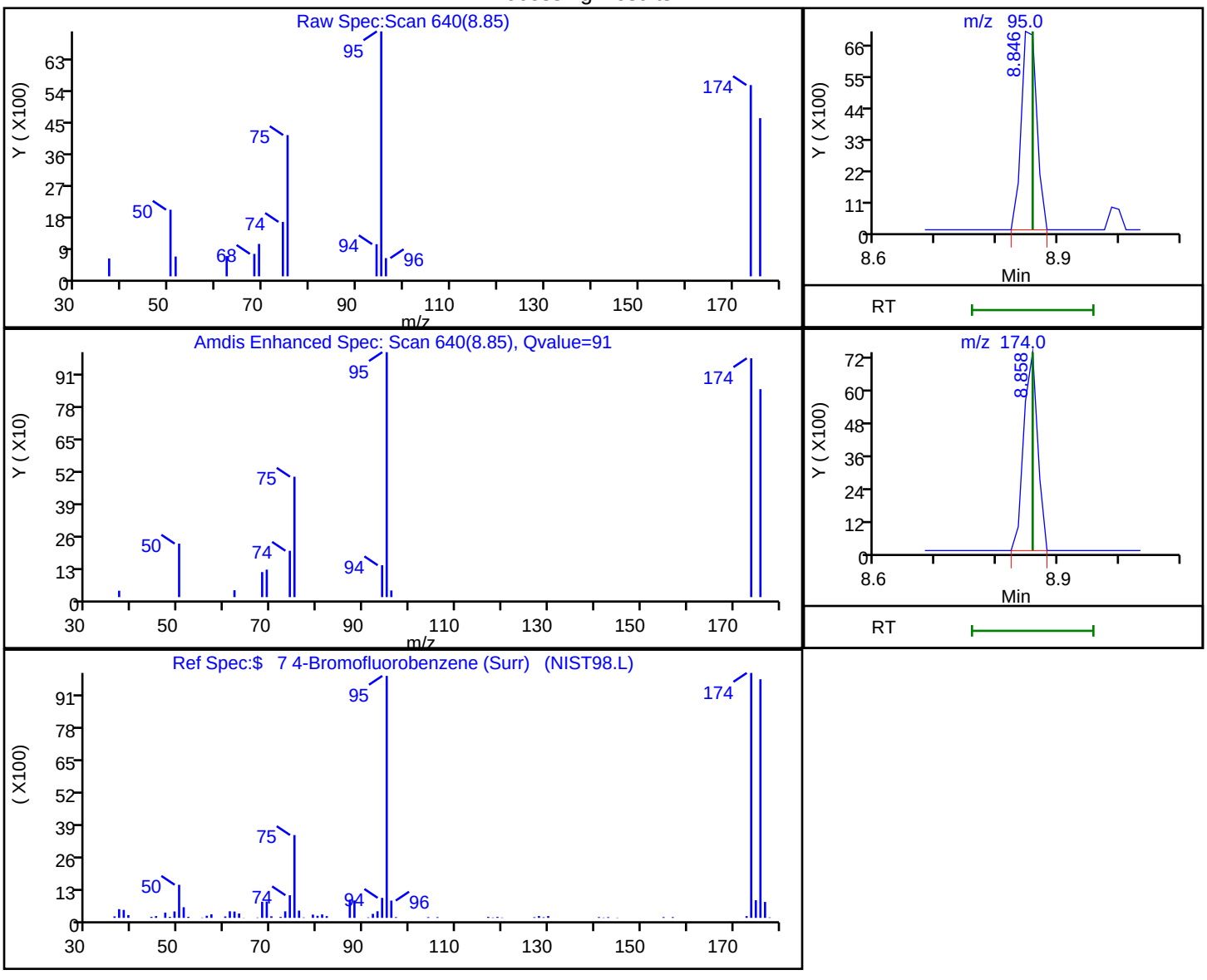
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 7 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Processing Results



RT	Mass	Response	Amount
8.85	95.00	12505	0.601023
8.86	174.00	11586	

Reviewer: laveyt, 16-Jul-2020 20:28:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

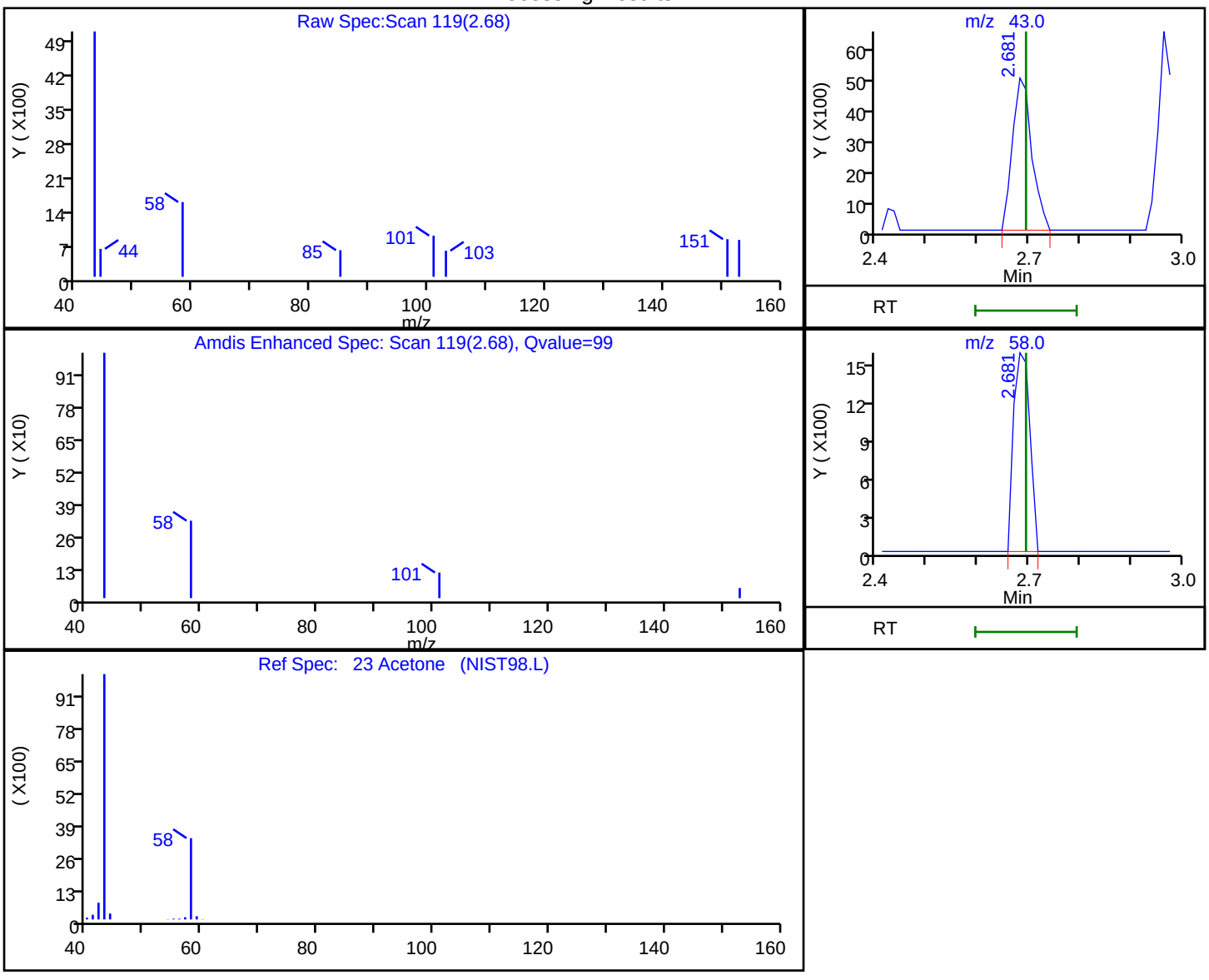
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D				
Injection Date:	16-Jul-2020 17:43:30	Instrument ID:	A3UX12		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.68	43.00	13251	1.316877
2.68	58.00	3390	

Reviewer: laveyt, 16-Jul-2020 18:54:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

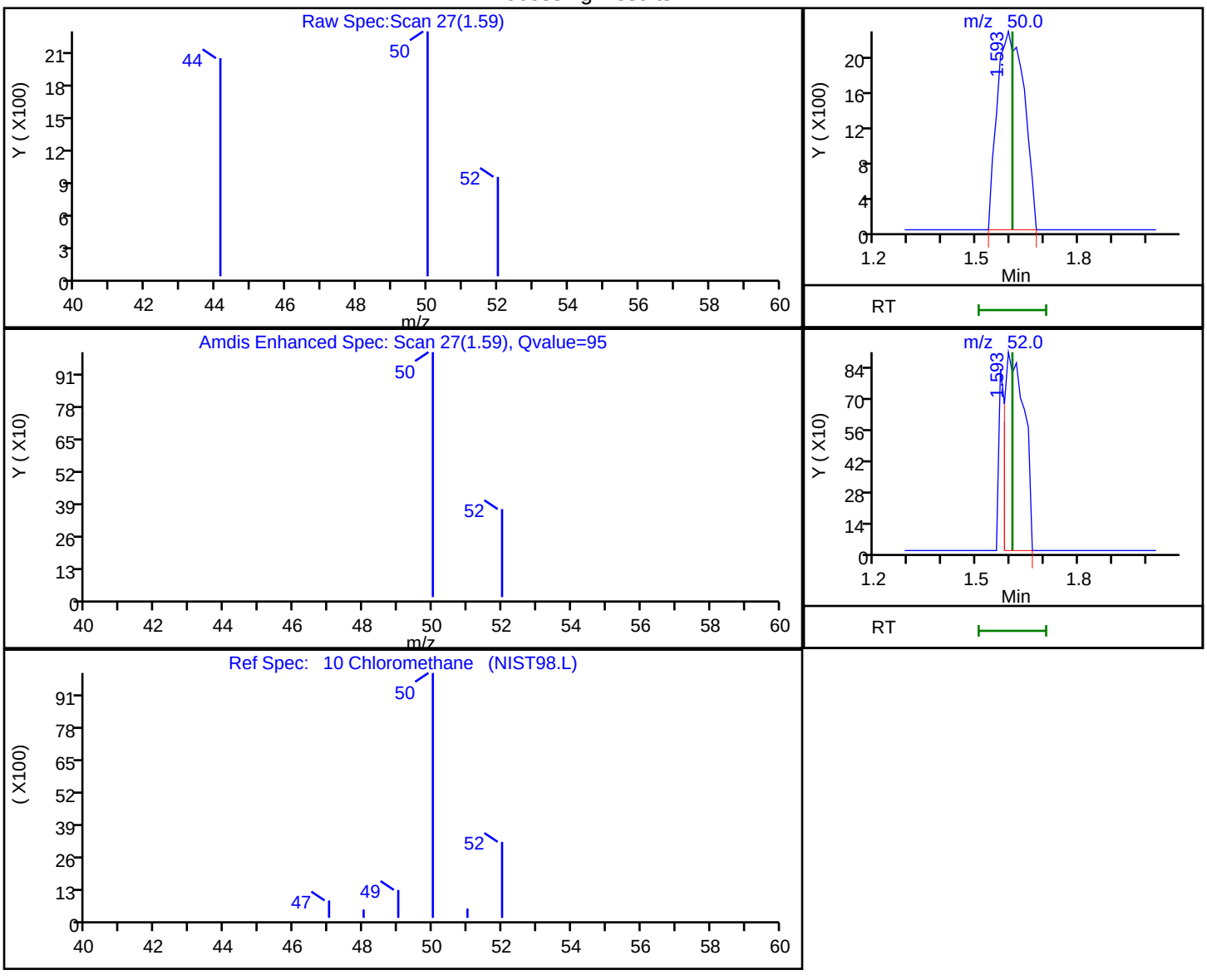
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.59	50.00	12359	0.432887
1.59	52.00	3652	

Reviewer: laveyt, 16-Jul-2020 20:36:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

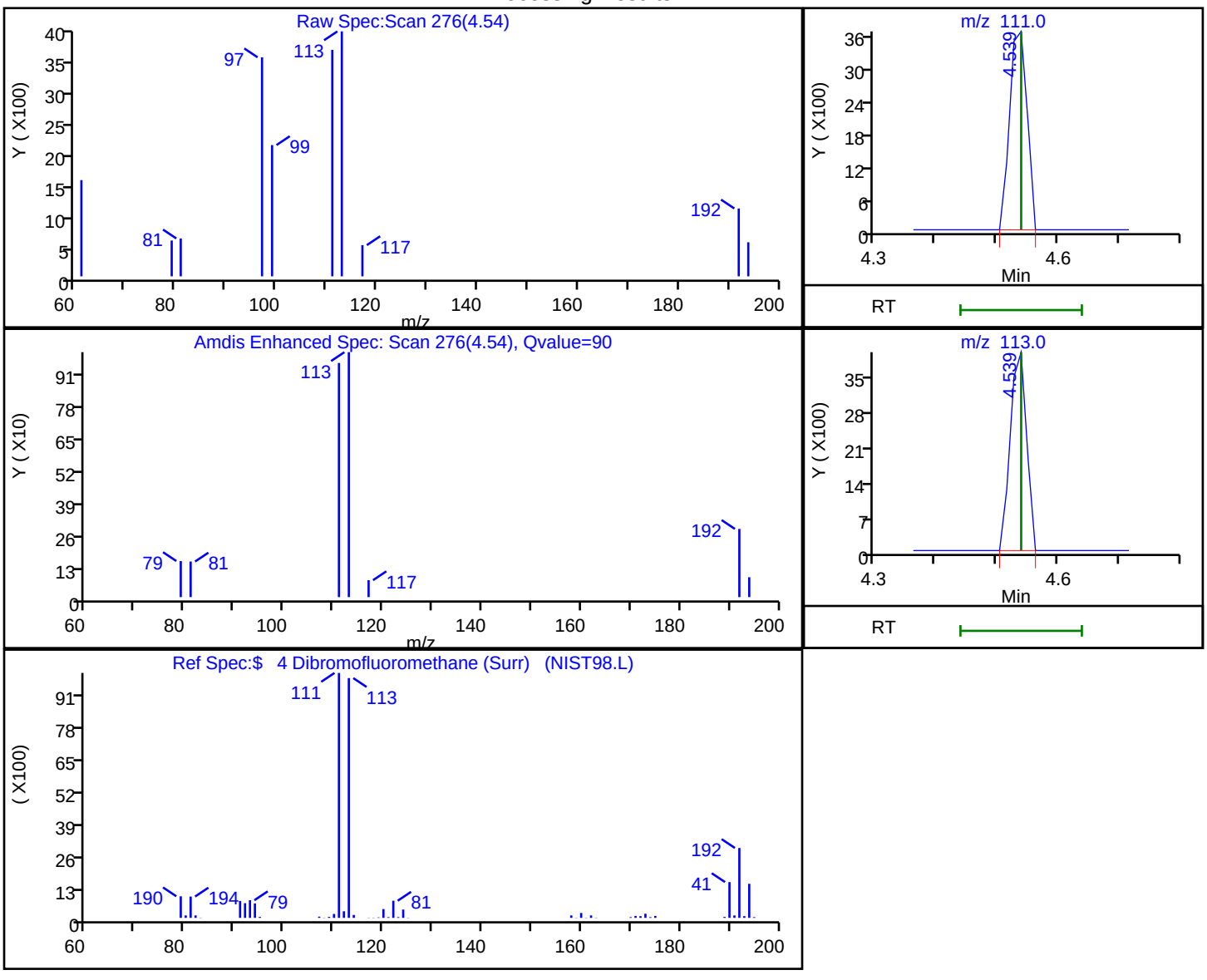
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 4 Dibromofluoromethane (Surr), CAS: 1868-53-7

Processing Results



RT	Mass	Response	Amount
4.54	111.00	7389	0.502294
4.54	113.00	7459	

Reviewer: laveyt, 16-Jul-2020 20:28:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

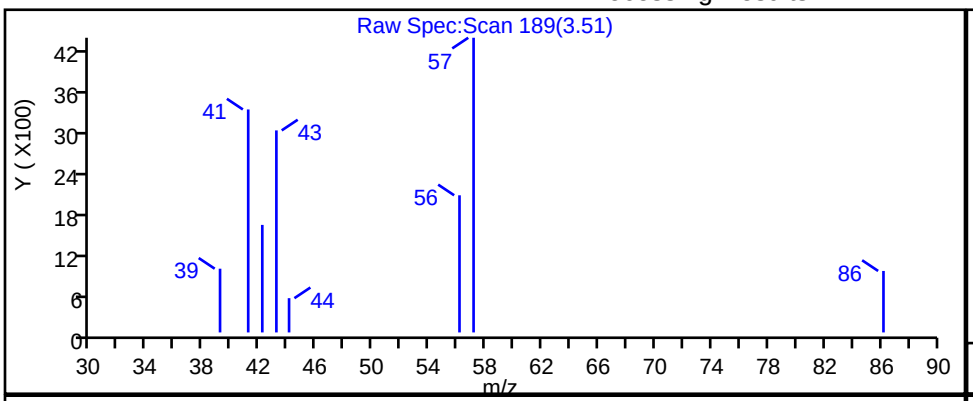
User Disabled Compound Report

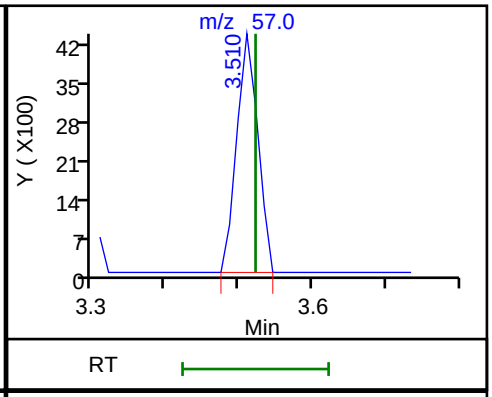
Eurofins TestAmerica, Canton

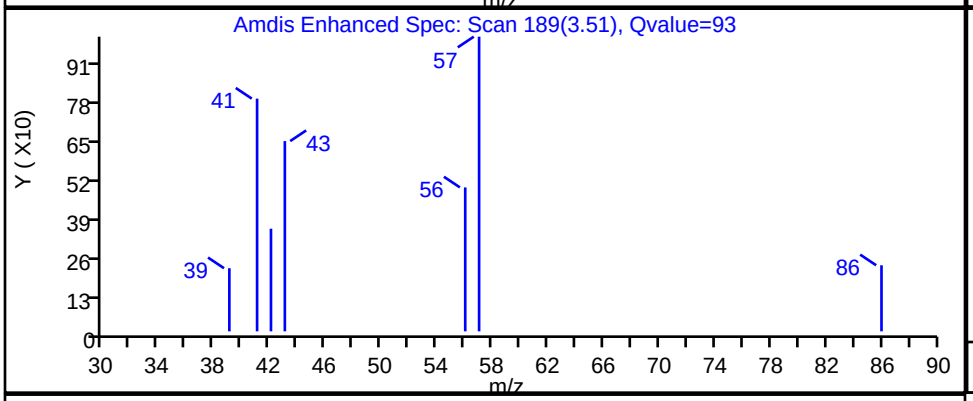
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

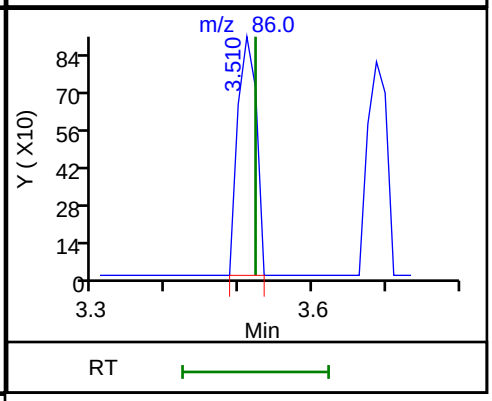
34 Hexane, CAS: 110-54-3

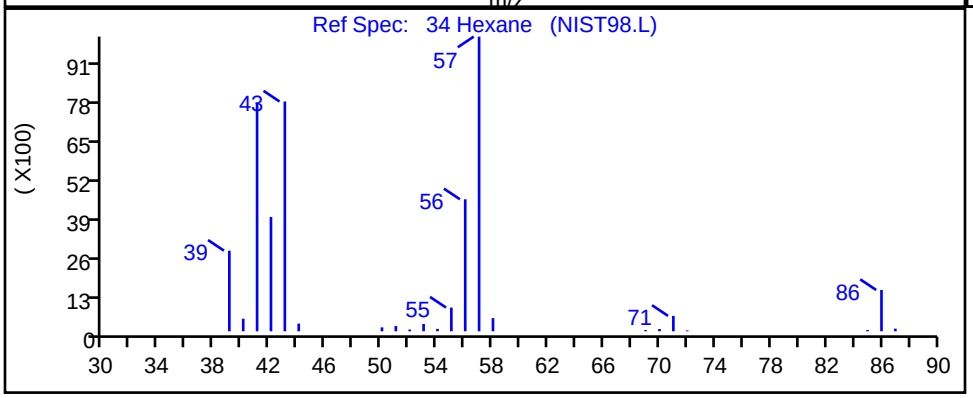
Processing Results











RT	Mass	Response	Amount
3.51	57.00	8658	0.390696
3.51	86.00	1601	

Reviewer: laveyt, 16-Jul-2020 20:37:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

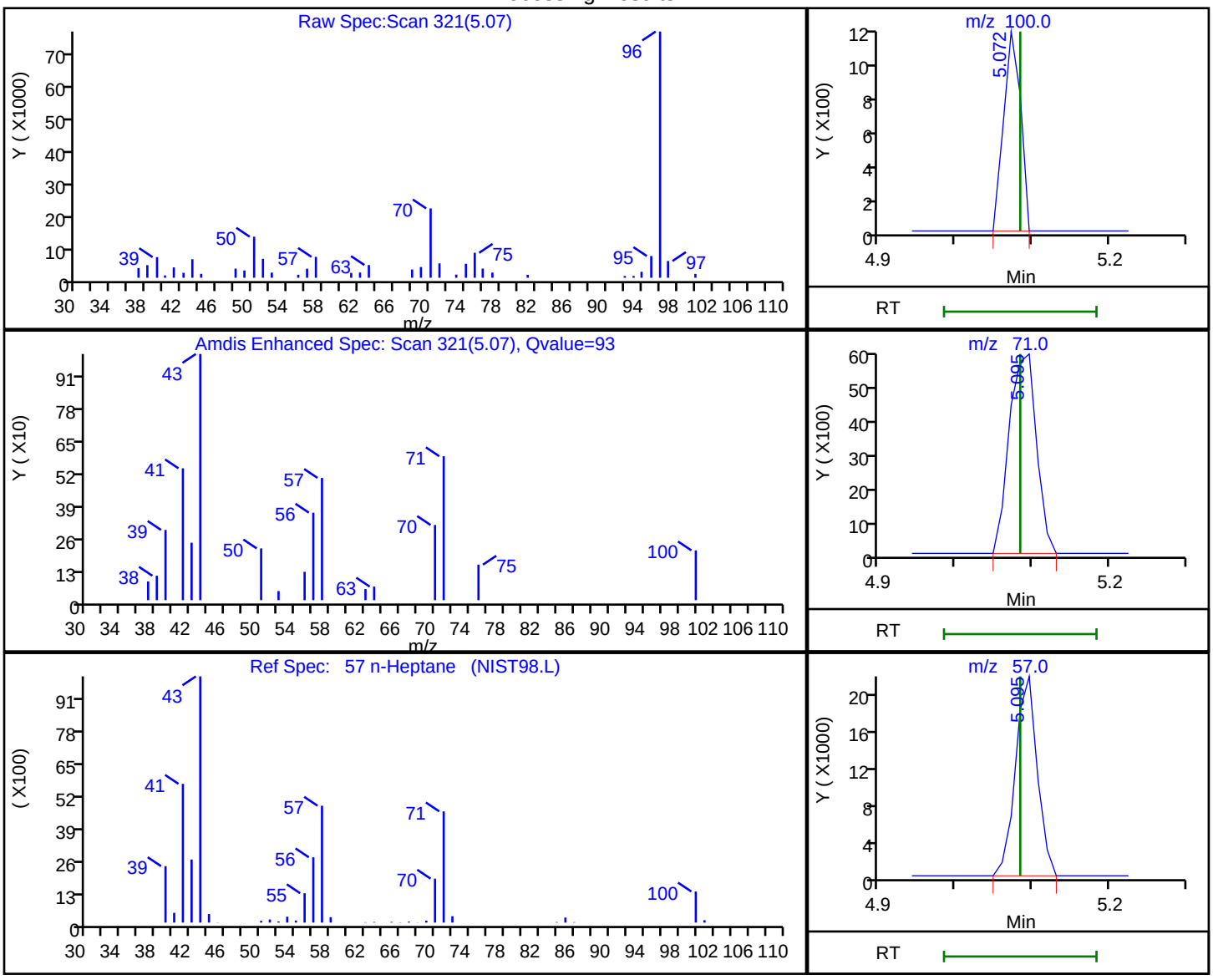
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

57 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
5.07	100.00	1822	
5.10	71.00	14789	
5.10	57.00	43282	0.854800

Reviewer: laveyt, 16-Jul-2020 18:56:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

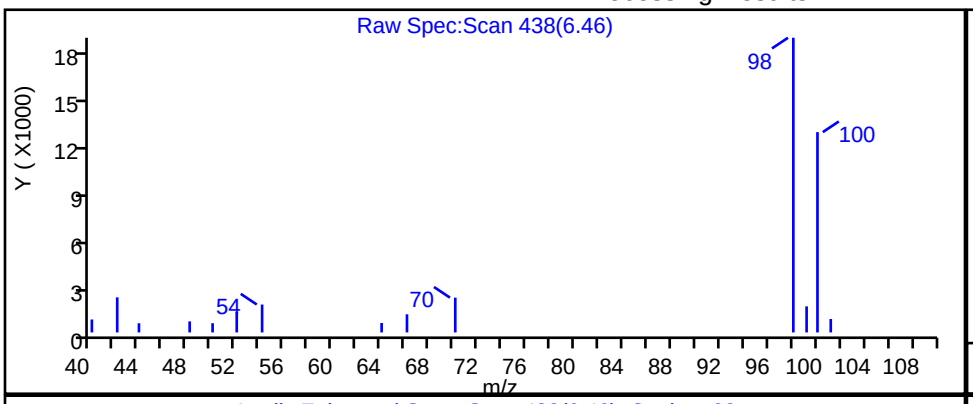
User Disabled Compound Report

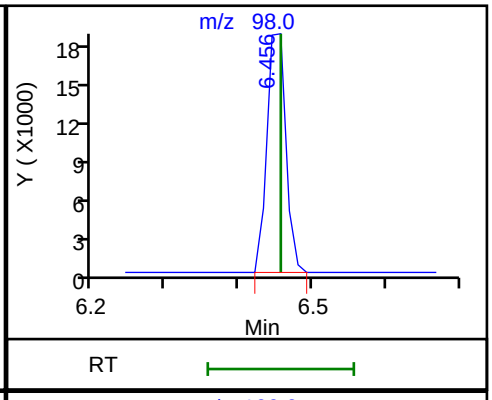
Eurofins TestAmerica, Canton

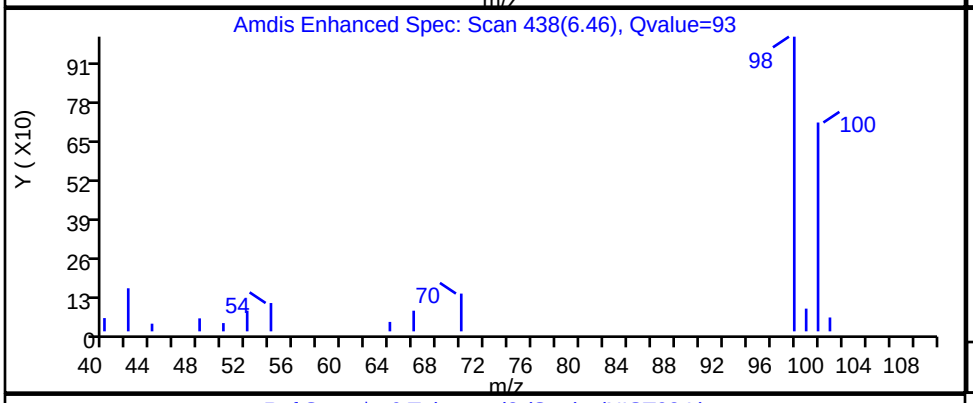
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D
Injection Date: 16-Jul-2020 17:43:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

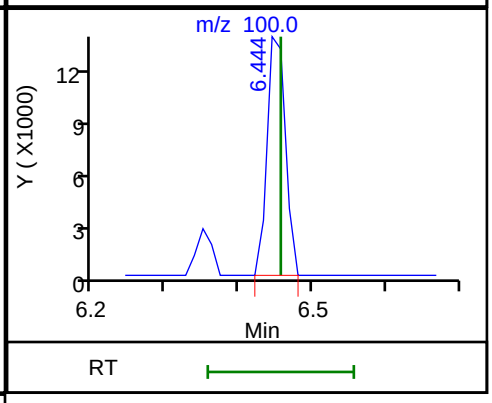
$ 6 Toluene-d8 (Surr), CAS: 2037-26-5

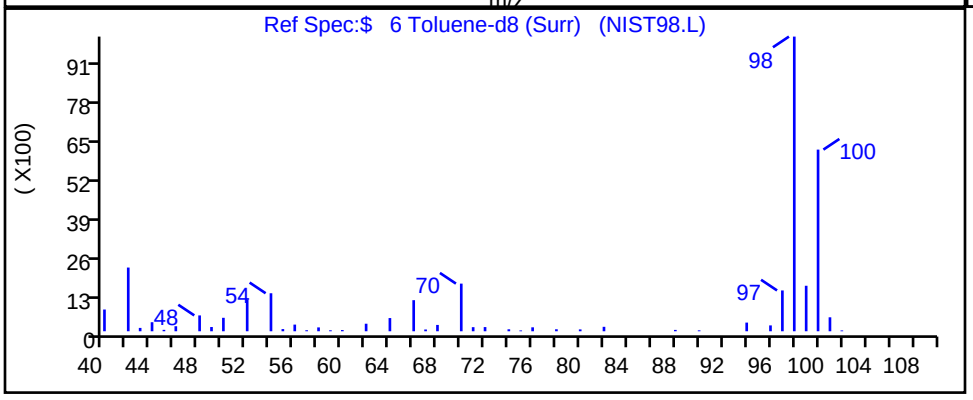
Processing Results











RT	Mass	Response	Amount
6.46	98.00	32928	0.639609
6.44	100.00	22734	

Reviewer: laveyt, 16-Jul-2020 18:52:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

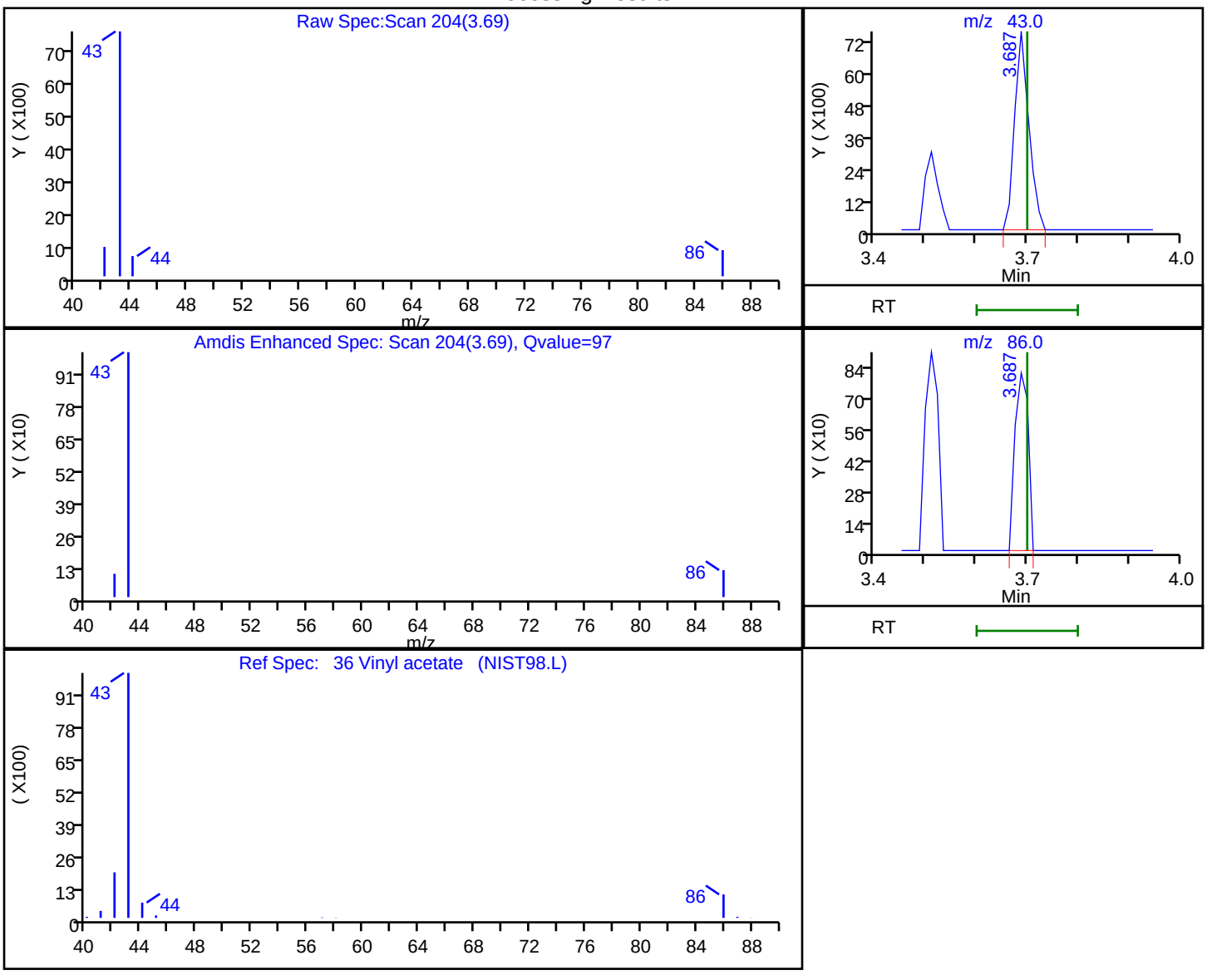
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279113.D				
Injection Date:	16-Jul-2020 17:43:30	Instrument ID:	A3UX12		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	5	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

36 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
3.69	43.00	14773	0.396541
3.69	86.00	1467	

Reviewer: laveyt, 16-Jul-2020 20:37:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279114.D
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Jul-2020 18:05:30 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-010
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:23:48 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 18:44:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1013893	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	604161	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	366234	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111		4.539				ND	ND	U
$ 5 1,2-Dichloroethane-d4 (Surr)	65		4.823				ND	ND	U
$ 6 Toluene-d8 (Surr)	98		6.456				ND	ND	U
$ 7 4-Bromofluorobenzene (Surr)	95		8.858				ND	ND	U
9 Dichlorodifluoromethane	85	1.415	1.403	0.012	96	12858	1.00	0.8119	
10 Chloromethane	50	1.605	1.605	0.000	93	22907	1.00	0.8509	
11 Butadiene	54	1.652	1.652	0.000	86	16845	1.00	0.9027	
12 Vinyl chloride	62	1.687	1.687	0.000	95	17064	1.00	0.8994	
14 Bromomethane	94	1.936	1.936	0.000	86	11010	1.00	0.8753	
15 Chloroethane	64	1.995	1.995	0.000	98	11645	1.00	0.8432	
16 Dichlorofluoromethane	67	2.184	2.184	0.000	96	26597	1.00	0.9224	
17 Trichlorofluoromethane	101	2.208	2.184	0.024	88	22183	1.00	1.00	
19 Ethyl ether	59	2.445	2.445	0.000	92	14820	1.00	0.9625	
20 Acrolein	56	2.563	2.563	0.000	94	6778	5.00	5.11	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	96	21022	1.00	1.03	
22 112TCTFE	101	2.670	2.670	0.000	88	11895	1.00	0.99	
23 Acetone	43	2.693	2.693	0.000	99	16108	2.00	2.50	
24 Iodomethane	142	2.776	2.776	0.000	97	19223	1.00	0.9270	
25 Carbon disulfide	76	2.823	2.823	0.000	99	37146	1.00	0.9050	
27 3-Chloro-1-propene	41	2.954	2.954	0.000	91	20839	1.00	0.9116	
28 Methyl acetate	43	2.977	2.977	0.000	98	28394	2.00	1.83	
29 Methylene Chloride	49	3.060	3.060	0.000	91	17390	1.00	0.9336	
30 2-Methyl-2-propanol	59	3.167	3.167	0.000	99	17528	10.0	9.10	
31 Acrylonitrile	53	3.285	3.285	0.000	98	67455	10.0	8.38	
32 trans-1,2-Dichloroethene	61	3.297	3.297	0.000	65	16647	1.00	0.8509	
33 Methyl tert-butyl ether	73	3.297	3.297	0.000	96	39426	1.00	0.8777	
34 Hexane	57	3.522	3.522	0.000	92	17358	1.00	0.8009	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	23537	1.00	0.9027	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.699	3.699	0.000	97	28476	1.00	0.7752	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	83	17440	1.00	0.9559	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	60	16418	1.00	0.9184	
42 2-Butanone (MEK)	72	4.160	4.149	0.011	99	5020	2.00	1.57	
46 Chlorobromomethane	49	4.338	4.338	0.000	96	14016	1.00	0.9449	
47 Tetrahydrofuran	42	4.373	4.374	-0.001	86	14616	2.00	1.79	
48 Chloroform	83	4.409	4.409	0.000	93	25004	1.00	0.9686	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	18522	1.00	0.9050	
50 Cyclohexane	84	4.598	4.598	0.000	91	25331	1.00	1.05	
52 Carbon tetrachloride	117	4.693	4.693	0.000	79	15810	1.00	0.9485	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	92	19325	1.00	0.9279	
53 Isobutyl alcohol	41	4.788	4.788	0.000	94	19594	25.0	24.0	
54 Benzene	78	4.870	4.870	0.000	96	62890	1.00	1.01	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	19689	1.00	0.9736	
57 n-Heptane	57	5.095	5.083	0.012	84	44411	1.00	1.23	
59 Trichloroethene	130	5.403	5.403	0.000	97	13562	1.00	0.9637	
61 Methylcyclohexane	83	5.569	5.569	0.000	87	25703	1.00	1.04	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	91	12467	1.00	0.9275	
64 Dibromomethane	174	5.711	5.711	0.000	92	7950	1.00	0.8331	
65 1,4-Dioxane	88	5.711	5.711	0.000	32	1282	20.0	7.31	
66 Dichlorobromomethane	83	5.829	5.829	0.000	96	12908	1.00	0.7687	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	90	14412	2.00	1.42	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	93	15367	1.00	0.7223	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	33198	2.00	1.51	
71 Toluene	91	6.515	6.515	0.000	97	46282	1.00	0.9233	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	94	14175	1.00	0.8727	
74 Ethyl methacrylate	69	6.776	6.776	0.000	86	14331	1.00	0.8749	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	90	8974	1.00	0.9142	
76 Tetrachloroethene	166	7.000	7.000	0.000	95	11469	1.00	0.9562	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	18373	1.00	1.00	
78 2-Hexanone	43	7.095	7.095	0.000	95	22216	2.00	1.69	
80 Chlorodibromomethane	129	7.225	7.225	0.000	83	9274	1.00	0.9613	
81 Ethylene Dibromide	107	7.332	7.332	0.000	90	10477	1.00	1.03	
83 Chlorobenzene	112	7.781	7.781	0.000	92	28930	1.00	0.9872	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	92	9310	1.00	0.9319	
85 Ethylbenzene	106	7.876	7.876	0.000	98	16358	1.00	1.02	
86 m-Xylene & p-Xylene	106	7.983	7.983	0.000	98	19083	1.00	0.9574	
87 o-Xylene	106	8.361	8.361	0.000	97	23782	1.00	1.16	
88 Styrene	104	8.373	8.373	0.000	95	37239	1.00	1.13	
89 Bromoform	173	8.550	8.551	-0.001	96	6225	1.00	0.9361	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	55771	1.00	1.08	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	90	19529	1.00	1.07	
92 Bromobenzene	156	9.000	9.000	0.000	92	15468	1.00	1.08	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	85	7073	1.00	1.12	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.048	-0.001	70	4494	1.00	0.8385	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	14811	1.00	0.9509	
97 2-Chlorotoluene	126	9.189	9.178	0.011	96	13592	1.00	0.9883	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	43601	1.00	0.9494	
99 4-Chlorotoluene	126	9.284	9.284	0.000	98	13920	1.00	0.9867	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	39497	1.00	0.9825	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	96	44707	1.00	0.9269	
105 sec-Butylbenzene	105	9.793	9.793	0.000	94	56787	1.00	0.9740	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	97	28415	1.00	1.05	
107 4-Isopropyltoluene	119	9.935	9.947	-0.012	97	46274	1.00	0.9544	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	29584	1.00	1.05	
111 n-Butylbenzene	91	10.337	10.337	0.000	98	38698	1.00	0.9519	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	97	27344	1.00	1.01	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	81	4295	1.00	1.00	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	92	14830	1.00	1.00	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	91	6148	1.00	1.08	
117 Naphthalene	128	12.195	12.195	0.000	97	48575	1.00	0.9875	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	94	13296	1.00	0.9717	
S 124 Trihalomethanes, Total	1				0		4.00	3.63	
S 125 Total BTEX	1				0		5.00	5.07	
S 126 1,2-Dichloroethene, Total	96				0			1.81	
S 127 1,3-Dichloropropene, Total	75				0			1.60	
S 128 Xylenes, Total	106				0		2.00	2.12	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	0.80	Units: uL
vmarolistdw_00352	Amount Added:	0.80	Units: uL
vmrprimw_00394	Amount Added:	0.80	Units: uL
vm50ss_00410	Amount Added:	0.80	Units: uL

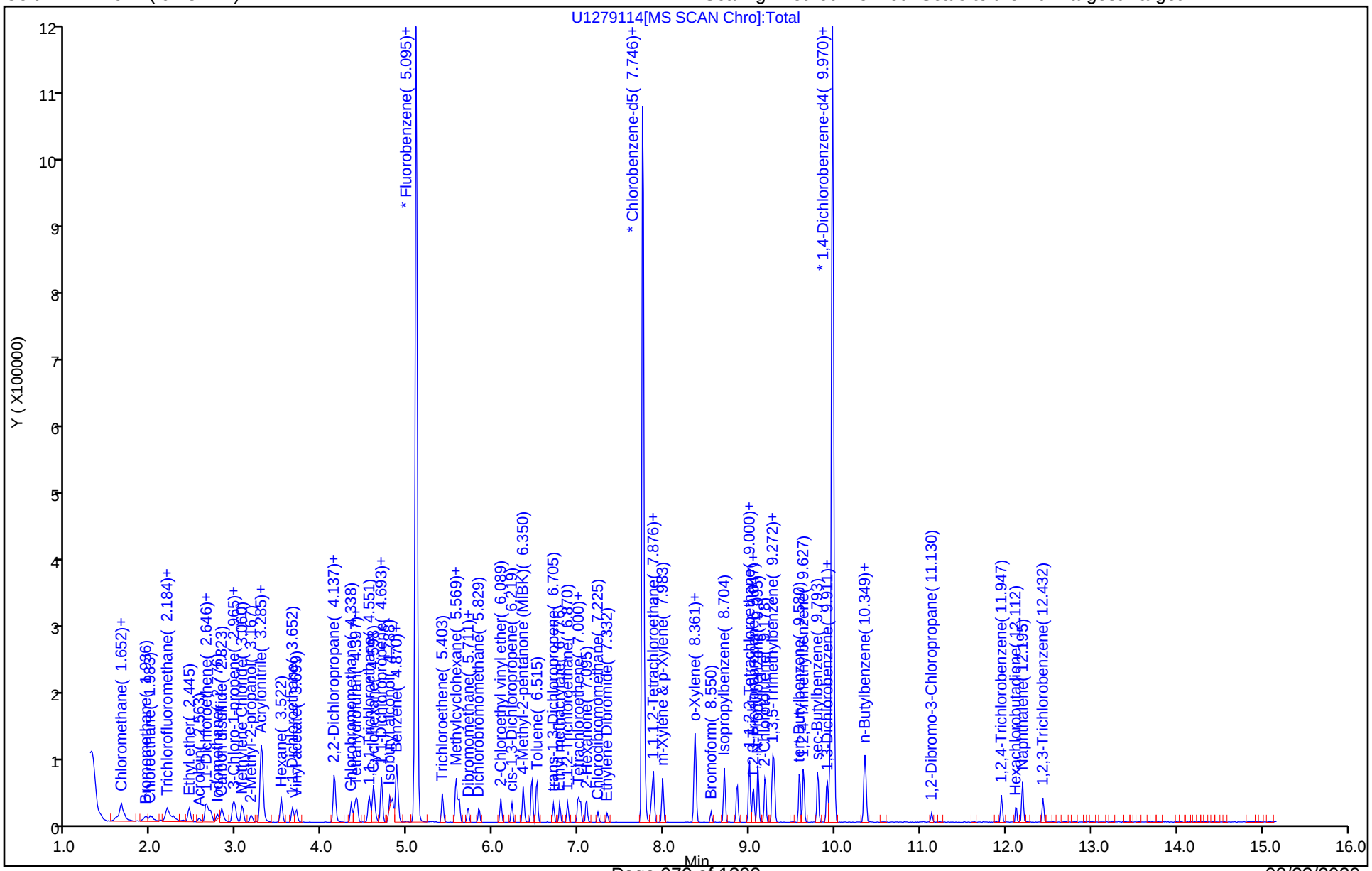
Report Date: 16-Jul-2020 21:23:50 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279114.D

Injection Date:	16-Jul-2020 18:05:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L2			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



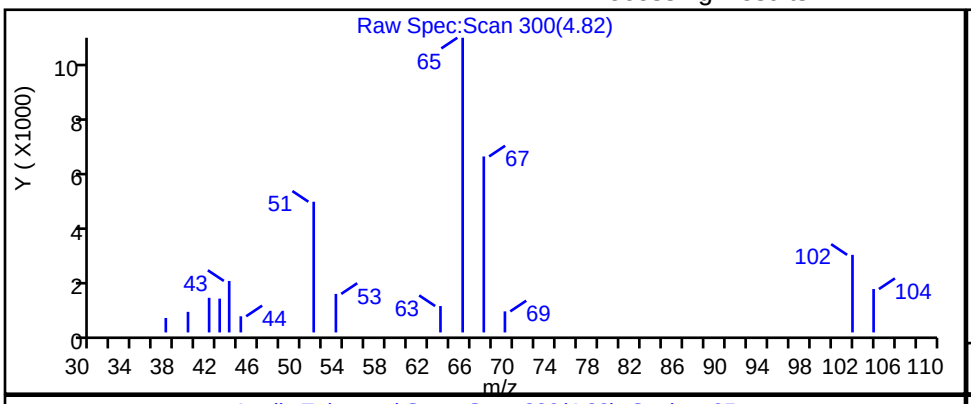
User Disabled Compound Report

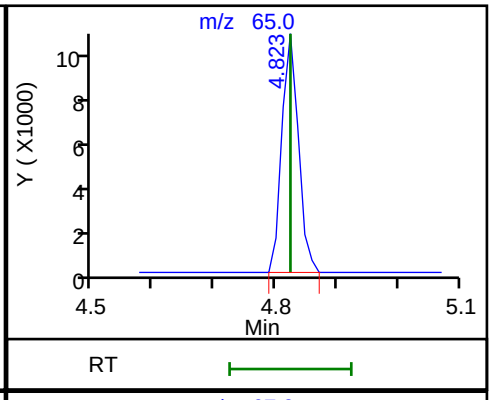
Eurofins TestAmerica, Canton

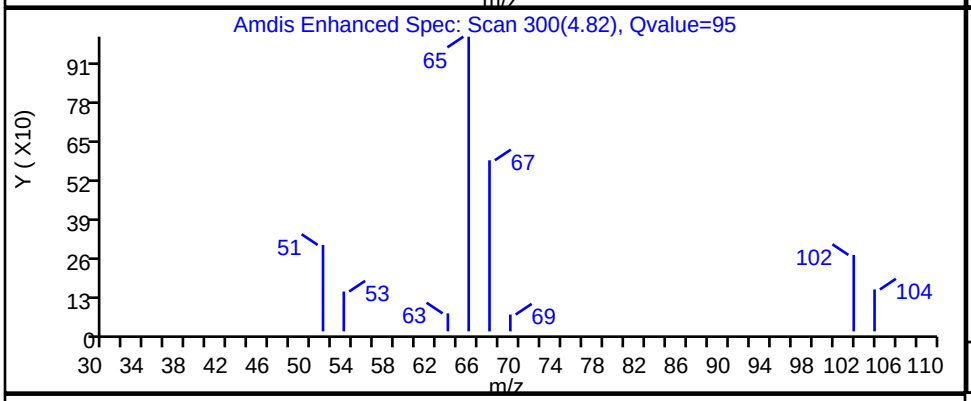
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279114.D
Injection Date: 16-Jul-2020 18:05:30 Instrument ID: A3UX12
Lims ID: std8260 L2
Client ID:
Operator ID: 001904 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

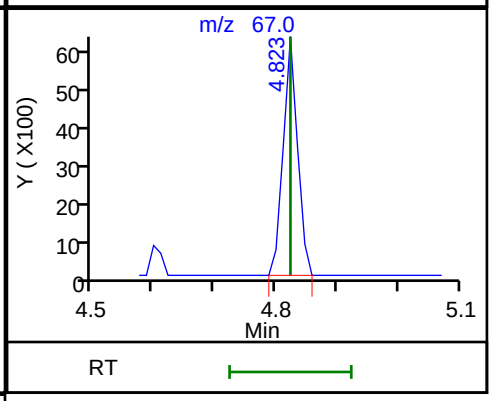
$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

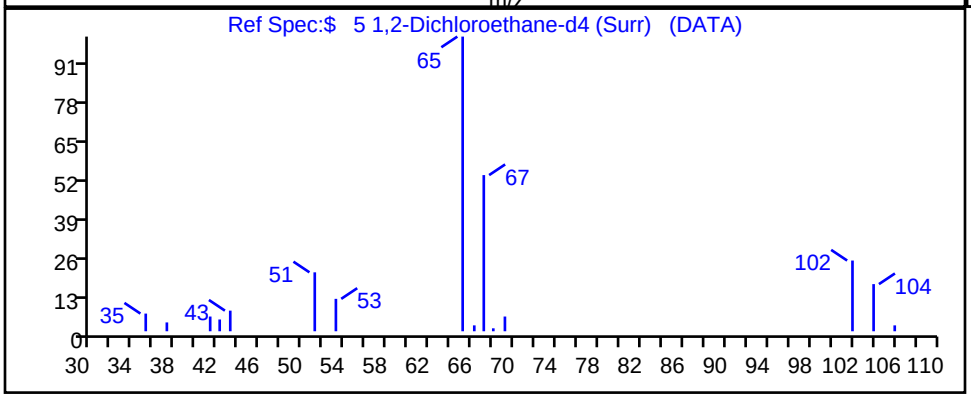
Processing Results











RT	Mass	Response	Amount
4.82	65.00	19971	1.142320
4.82	67.00	10329	

Reviewer: laveyt, 16-Jul-2020 20:29:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

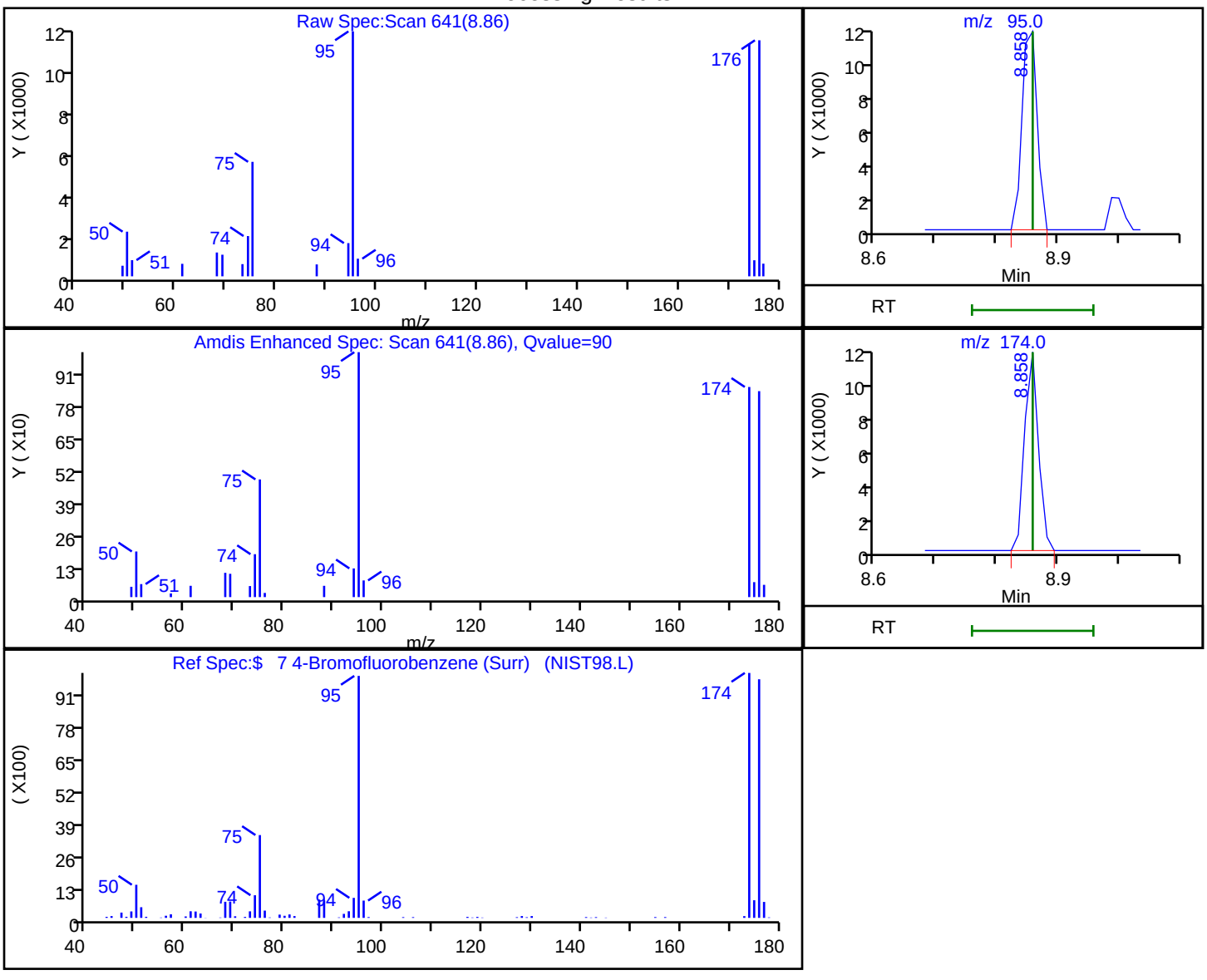
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279114.D
Injection Date: 16-Jul-2020 18:05:30 Instrument ID: A3UX12
Lims ID: std8260 L2
Client ID:
Operator ID: 001904 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 7 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Processing Results



RT	Mass	Response	Amount
8.86	95.00	20630	1.384413
8.86	174.00	17905	

Reviewer: laveyt, 16-Jul-2020 20:29:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

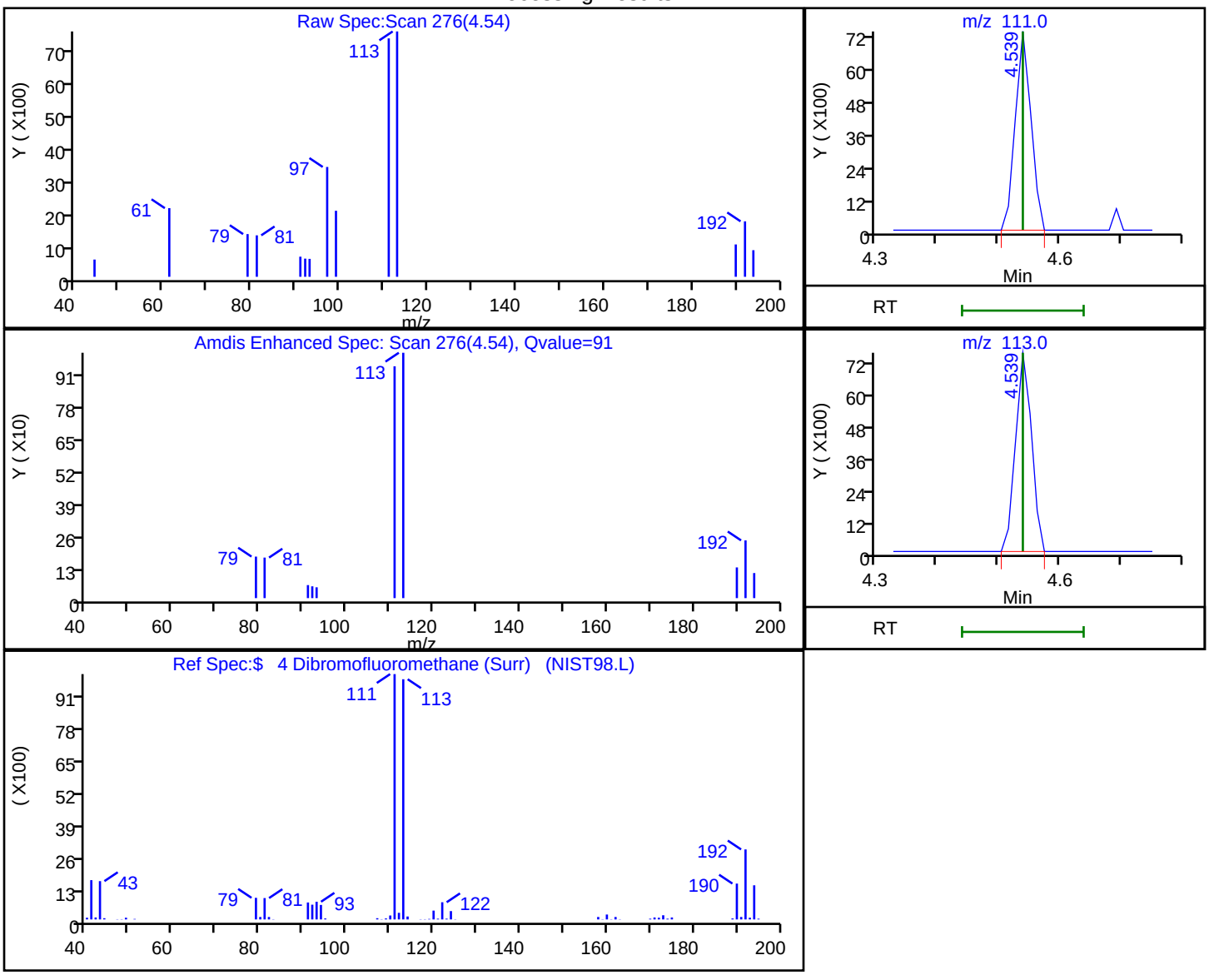
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279114.D
Injection Date: 16-Jul-2020 18:05:30 Instrument ID: A3UX12
Lims ID: std8260 L2
Client ID:
Operator ID: 001904 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 4 Dibromofluoromethane (Surr), CAS: 1868-53-7

Processing Results



RT	Mass	Response	Amount
4.54	111.00	13114	0.956018
4.54	113.00	13746	

Reviewer: laveyt, 16-Jul-2020 20:29:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

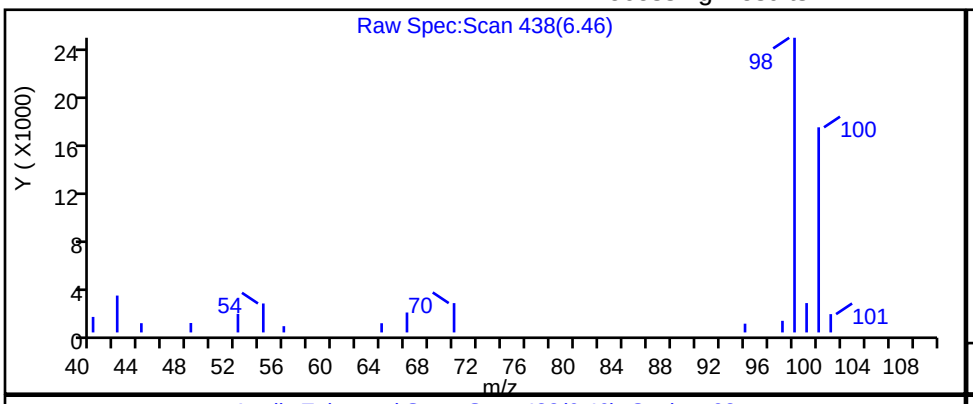
User Disabled Compound Report

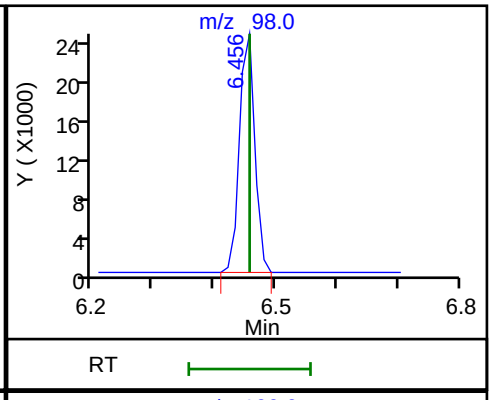
Eurofins TestAmerica, Canton

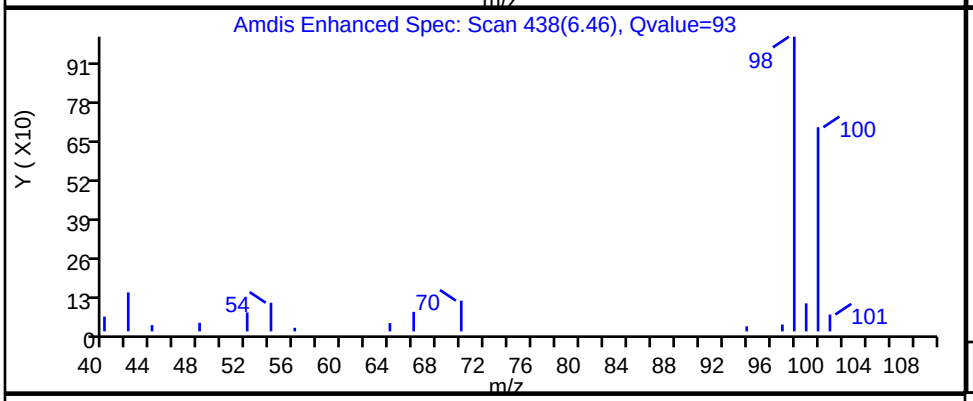
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279114.D
Injection Date: 16-Jul-2020 18:05:30 Instrument ID: A3UX12
Lims ID: std8260 L2
Client ID:
Operator ID: 001904 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

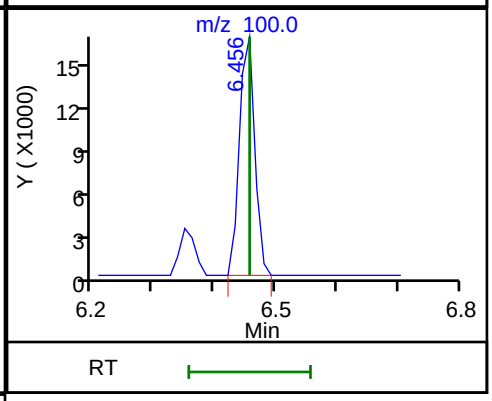
$ 6 Toluene-d8 (Surr), CAS: 2037-26-5

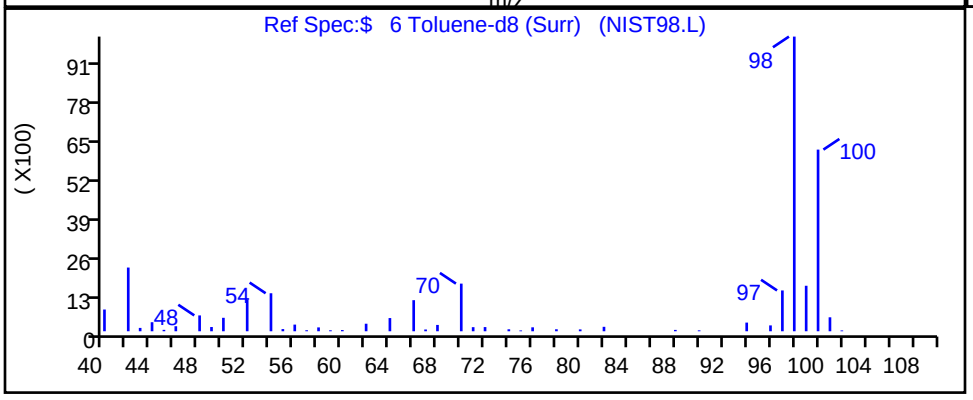
Processing Results











RT	Mass	Response	Amount
6.46	98.00	42331	1.049519
6.46	100.00	29407	

Reviewer: laveyt, 16-Jul-2020 20:29:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279115.D
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Jul-2020 18:27:30 ALS Bottle#: 7 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-011
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:23:54 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 18:51:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1066368	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.745	7.746	-0.001	87	745447	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	384863	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	68389	5.00	4.83	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.823	0.000	96	88950	5.00	5.13	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	254761	5.00	5.05	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	92	90585	5.00	5.25	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	95890	5.00	5.76	
10 Chloromethane	50	1.592	1.605	-0.013	98	180045	5.00	6.36	
11 Butadiene	54	1.652	1.652	0.000	89	124092	5.00	6.32	
12 Vinyl chloride	62	1.687	1.687	0.000	97	121481	5.00	6.09	
14 Bromomethane	94	1.936	1.936	0.000	91	72628	5.00	5.49	
15 Chloroethane	64	1.995	1.995	0.000	99	80121	5.00	5.52	
16 Dichlorofluoromethane	67	2.184	2.184	0.000	97	157289	5.00	5.19	
17 Trichlorofluoromethane	101	2.184	2.184	0.000	85	111171	5.00	4.76	
19 Ethyl ether	59	2.444	2.445	-0.001	93	82827	5.00	5.11	
20 Acrolein	56	2.563	2.563	0.000	97	41496	25.0	29.7	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	96	120487	5.00	5.62	
22 112TCTFE	101	2.669	2.670	-0.001	96	66947	5.00	5.32	
23 Acetone	43	2.693	2.693	0.000	100	81521	10.0	12.0	
24 Iodomethane	142	2.776	2.776	0.000	98	114665	5.00	5.26	
25 Carbon disulfide	76	2.823	2.823	0.000	99	245305	5.00	5.68	
27 3-Chloro-1-propene	41	2.953	2.954	-0.001	92	154691	5.00	6.43	
28 Methyl acetate	43	2.977	2.977	0.000	99	210795	10.0	12.9	
29 Methylene Chloride	49	3.060	3.060	0.000	97	118801	5.00	6.06	
30 2-Methyl-2-propanol	59	3.166	3.167	-0.001	99	125121	50.0	61.8	
31 Acrylonitrile	53	3.284	3.285	-0.001	100	504697	50.0	59.6	
32 trans-1,2-Dichloroethene	61	3.296	3.297	-0.001	66	122478	5.00	5.95	
33 Methyl tert-butyl ether	73	3.296	3.297	-0.001	96	256224	5.00	5.42	
34 Hexane	57	3.521	3.522	-0.001	91	128512	5.00	5.64	
35 1,1-Dichloroethane	63	3.651	3.652	-0.001	96	155829	5.00	5.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.699	3.699	0.000	97	212513	5.00	5.50	
41 cis-1,2-Dichloroethene	96	4.136	4.137	-0.001	83	90791	5.00	4.73	
40 2,2-Dichloropropane	77	4.136	4.137	-0.001	61	89862	5.00	4.78	
42 2-Butanone (MEK)	72	4.148	4.149	-0.001	100	32487	10.0	9.65	
46 Chlorobromomethane	49	4.338	4.338	0.000	95	81886	5.00	5.25	
47 Tetrahydrofuran	42	4.373	4.374	-0.001	90	95835	10.0	11.2	
48 Chloroform	83	4.409	4.409	0.000	94	135443	5.00	4.99	
49 1,1,1-Trichloroethane	97	4.562	4.551	0.011	98	105527	5.00	4.90	
50 Cyclohexane	84	4.598	4.598	0.000	92	127620	5.00	5.01	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	94	110916	5.00	5.06	
52 Carbon tetrachloride	117	4.693	4.693	0.000	77	83787	5.00	4.78	
53 Isobutyl alcohol	41	4.787	4.788	-0.001	95	124596	125.0	144.9	
54 Benzene	78	4.870	4.870	0.000	96	337044	5.00	5.15	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	96	105694	5.00	4.97	
57 n-Heptane	57	5.083	5.083	0.000	93	87098	5.00	5.28	
59 Trichloroethene	130	5.403	5.403	0.000	97	76118	5.00	5.14	
61 Methylcyclohexane	83	5.568	5.569	-0.001	89	135793	5.00	5.24	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	94	76423	5.00	5.41	
65 1,4-Dioxane	88	5.710	5.711	-0.001	27	15971	100.0	86.6	
64 Dibromomethane	174	5.710	5.711	-0.001	94	48536	5.00	4.84	
66 Dichlorobromomethane	83	5.829	5.829	0.000	98	85277	5.00	4.83	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	106727	10.0	10.0	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	109191	5.00	4.88	
70 4-Methyl-2-pentanone (MIBK)	43	6.349	6.350	-0.001	97	250773	10.0	10.8	
71 Toluene	91	6.515	6.515	0.000	98	302953	5.00	4.90	
72 trans-1,3-Dichloropropene	75	6.704	6.705	-0.001	94	96966	5.00	4.84	
74 Ethyl methacrylate	69	6.775	6.776	-0.001	90	104880	5.00	5.19	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	59524	5.00	4.91	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	68082	5.00	4.60	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	92	113574	5.00	5.00	
78 2-Hexanone	43	7.095	7.095	0.000	95	177166	10.0	10.9	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	55714	5.00	4.68	
81 Ethylene Dibromide	107	7.331	7.332	-0.001	99	60273	5.00	4.81	
83 Chlorobenzene	112	7.781	7.781	0.000	94	185806	5.00	5.14	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	60497	5.00	4.91	
85 Ethylbenzene	106	7.876	7.876	0.000	99	102746	5.00	5.17	
86 m-Xylene & p-Xylene	106	7.982	7.983	-0.001	98	128823	5.00	5.24	
87 o-Xylene	106	8.361	8.361	0.000	95	125874	5.00	4.97	
88 Styrene	104	8.373	8.373	0.000	95	201429	5.00	4.95	
89 Bromoform	173	8.550	8.551	-0.001	95	38309	5.00	4.67	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	320834	5.00	5.05	
92 Bromobenzene	156	9.000	9.000	0.000	94	76292	5.00	5.07	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	83	98841	5.00	5.14	
94 1,2,3-Trichloropropane	110	9.035	9.036	-0.001	86	33941	5.00	5.11	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.048	-0.001	87	30147	5.00	5.35	
96 N-Propylbenzene	120	9.094	9.095	-0.001	99	86386	5.00	5.28	
97 2-Chlorotoluene	126	9.189	9.178	0.011	96	73516	5.00	5.09	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	95	250416	5.00	5.19	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	74622	5.00	5.03	
102 tert-Butylbenzene	119	9.580	9.580	0.000	93	207081	5.00	4.90	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	255743	5.00	5.05	
105 sec-Butylbenzene	105	9.793	9.793	0.000	94	304124	5.00	4.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	99	143474	5.00	5.03	
107 4-Isopropyltoluene	119	9.935	9.947	-0.012	97	262116	5.00	5.14	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	144861	5.00	4.90	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	218725	5.00	5.12	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	97	143813	5.00	5.08	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	82	22950	5.00	5.11	
115 1,2,4-Trichlorobenzene	180	11.946	11.947	-0.001	94	77534	5.00	4.97	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	27773	5.00	4.65	
117 Naphthalene	128	12.195	12.195	0.000	97	270015	5.00	5.22	
118 1,2,3-Trichlorobenzene	180	12.431	12.432	-0.001	94	74152	5.00	5.16	
S 124 Trihalomethanes, Total	1				0		20.0	19.2	
S 125 Total BTEX	1				0		25.0	25.4	
S 126 1,2-Dichloroethene, Total	96				0			10.7	
S 127 1,3-Dichloropropene, Total	75				0			9.72	
S 128 Xylenes, Total	106				0		10.0	10.2	

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL	
VMRGAS_00347	Amount Added:	4.00	Units: uL	
vmarolistdw_00352	Amount Added:	4.00	Units: uL	
vmrprimw_00394	Amount Added:	4.00	Units: uL	
vm50ss_00410	Amount Added:	4.00	Units: uL	

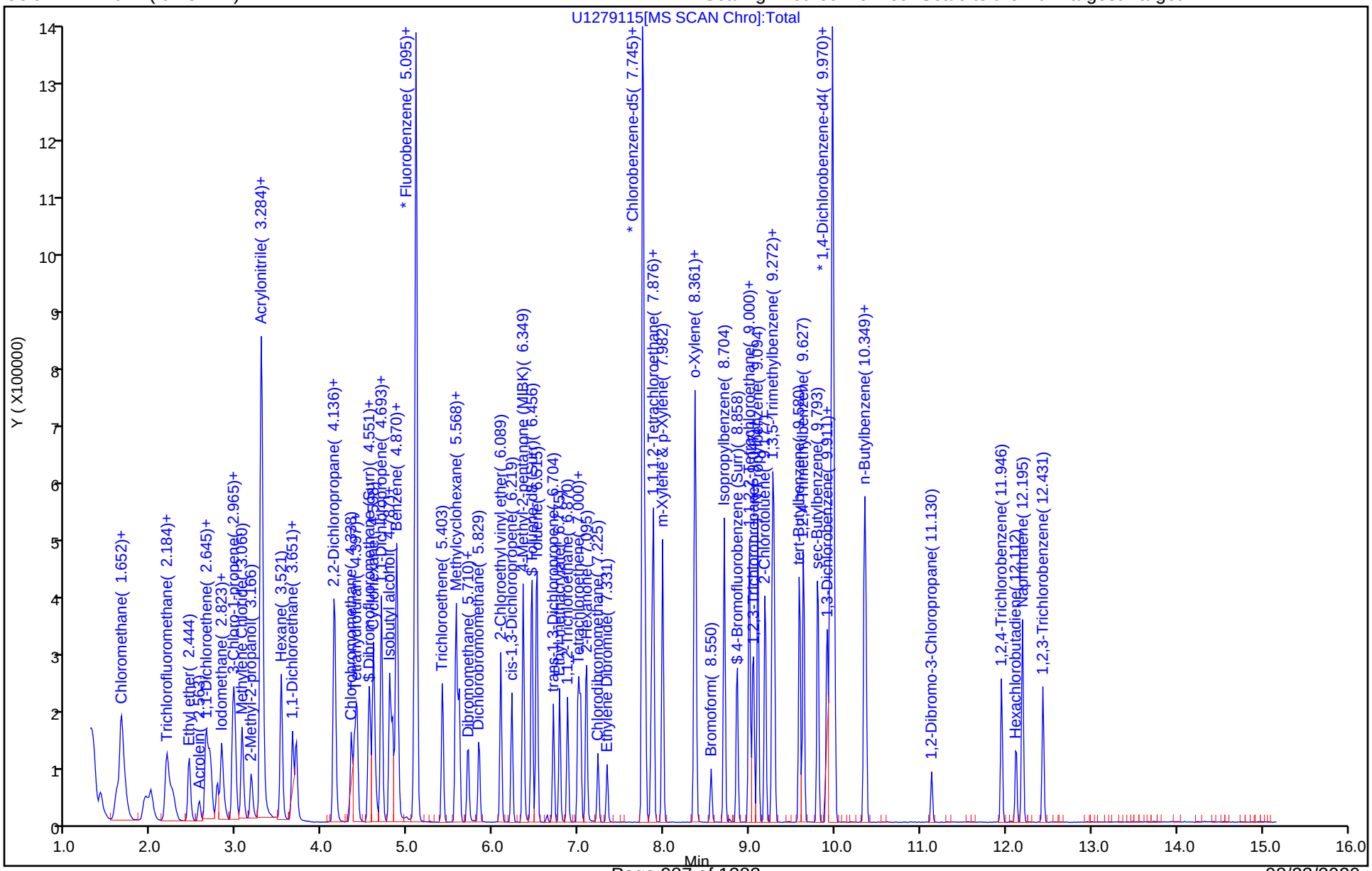
Report Date: 16-Jul-2020 21:23:57 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279115.D

Injection Date:	16-Jul-2020 18:27:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L3			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279116.D
Lims ID: std8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Jul-2020 18:50:30 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-012
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:24:04 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 19:13:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	98	886512	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	86	632834	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	393985	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	117634	10.0	10.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.811	4.811	0.000	97	143083	10.0	9.94	
$ 6 Toluene-d8 (Surr)	98	6.444	6.444	0.000	93	458994	10.0	10.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.846	8.846	0.000	94	138527	10.0	9.45	
9 Dichlorodifluoromethane	85	1.392	1.392	0.000	99	151666	10.0	11.0	
10 Chloromethane	50	1.581	1.581	0.000	98	233672	10.0	9.93	M
11 Butadiene	54	1.628	1.628	0.000	91	159384	10.0	9.77	
12 Vinyl chloride	62	1.664	1.664	0.000	97	171618	10.0	10.3	
14 Bromomethane	94	1.912	1.912	0.000	91	127041	10.0	11.6	
15 Chloroethane	64	1.983	1.983	0.000	100	136173	10.0	11.3	
16 Dichlorofluoromethane	67	2.161	2.161	0.000	97	288627	10.0	11.4	
17 Trichlorofluoromethane	101	2.173	2.173	0.000	84	210999	10.0	10.9	
19 Ethyl ether	59	2.433	2.433	0.000	92	157156	10.0	11.7	
20 Acrolein	56	2.551	2.551	0.000	99	56998	50.0	49.1	
21 1,1-Dichloroethene	61	2.622	2.622	0.000	98	183544	10.0	10.3	
22 112TCTFE	101	2.658	2.658	0.000	94	105296	10.0	10.1	
23 Acetone	43	2.681	2.681	0.000	100	119029	20.0	21.1	
24 Iodomethane	142	2.764	2.764	0.000	98	207558	10.0	11.4	
25 Carbon disulfide	76	2.812	2.812	0.000	100	378954	10.0	10.6	
27 3-Chloro-1-propene	41	2.942	2.942	0.000	89	205590	10.0	10.3	
28 Methyl acetate	43	2.965	2.965	0.000	97	286458	20.0	21.1	
29 Methylene Chloride	49	3.048	3.048	0.000	94	176439	10.0	10.8	
30 2-Methyl-2-propanol	59	3.166	3.166	0.000	99	191199	100.0	113.6	
31 Acrylonitrile	53	3.273	3.273	0.000	99	723158	100.0	102.7	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	66	186220	10.0	10.9	
33 Methyl tert-butyl ether	73	3.285	3.285	0.000	96	418565	10.0	10.7	
34 Hexane	57	3.510	3.510	0.000	91	169215	10.0	8.93	
35 1,1-Dichloroethane	63	3.640	3.640	0.000	96	236866	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	302914	10.0	9.43	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	82	172589	10.0	10.8	
40 2,2-Dichloropropane	77	4.137	4.125	0.012	63	171711	10.0	11.0	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	60927	20.0	21.8	
46 Chlorobromomethane	49	4.338	4.338	0.000	97	153287	10.0	11.8	
47 Tetrahydrofuran	42	4.373	4.373	0.000	86	149777	20.0	21.0	
48 Chloroform	83	4.397	4.397	0.000	94	248247	10.0	11.0	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	176862	10.0	9.88	
50 Cyclohexane	84	4.598	4.598	0.000	90	192287	10.0	9.08	
52 Carbon tetrachloride	117	4.693	4.693	0.000	82	141890	10.0	9.74	
51 1,1-Dichloropropene	75	4.681	4.681	0.000	93	168265	10.0	9.24	
53 Isobutyl alcohol	41	4.788	4.788	0.000	94	172245	250.0	240.9	
54 Benzene	78	4.859	4.859	0.000	96	525396	10.0	9.65	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	175519	10.0	9.93	
57 n-Heptane	57	5.072	5.072	0.000	89	95900	10.0	8.11	
59 Trichloroethene	130	5.403	5.403	0.000	98	125955	10.0	10.2	
61 Methylcyclohexane	83	5.557	5.557	0.000	90	197666	10.0	9.18	
62 1,2-Dichloropropane	63	5.592	5.592	0.000	93	115005	10.0	9.79	
64 Dibromomethane	174	5.711	5.711	0.000	91	93337	10.0	11.2	
65 1,4-Dioxane	88	5.711	5.711	0.000	92	38163	200.0	248.9	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	167964	10.0	11.4	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	205324	20.0	23.2	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	208362	10.0	11.2	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	475232	20.0	24.7	
71 Toluene	91	6.503	6.503	0.000	99	609655	10.0	11.6	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	95	161548	10.0	9.50	
74 Ethyl methacrylate	69	6.776	6.776	0.000	88	161989	10.0	9.44	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	97580	10.0	9.49	
76 Tetrachloroethene	166	6.989	6.989	0.000	96	118877	10.0	9.46	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	180029	10.0	9.33	
78 2-Hexanone	43	7.083	7.083	0.000	97	255826	20.0	18.6	
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	98356	10.0	9.73	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	102871	10.0	9.68	
83 Chlorobenzene	112	7.781	7.781	0.000	95	298670	10.0	9.73	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	94	108087	10.0	10.3	
85 Ethylbenzene	106	7.876	7.876	0.000	99	163196	10.0	9.68	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	206929	10.0	9.91	
87 o-Xylene	106	8.361	8.361	0.000	96	210472	10.0	9.79	
88 Styrene	104	8.373	8.373	0.000	95	333048	10.0	9.65	
89 Bromoform	173	8.550	8.550	0.000	96	70911	10.0	10.2	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	522254	10.0	9.69	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	86	164980	10.0	8.38	
92 Bromobenzene	156	9.000	9.000	0.000	91	133920	10.0	8.70	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	88	58331	10.0	8.58	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.047	0.000	90	45074	10.0	7.82	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	141874	10.0	8.47	
97 2-Chlorotoluene	126	9.178	9.178	0.000	96	123687	10.0	8.36	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	476426	10.0	9.64	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	142976	10.0	9.42	
102 tert-Butylbenzene	119	9.580	9.580	0.000	93	410479	10.0	9.49	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	95	521486	10.0	10.0	
105 sec-Butylbenzene	105	9.793	9.793	0.000	94	583446	10.0	9.30	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	289123	10.0	9.89	
107 4-Isopropyltoluene	119	9.935	9.935	0.000	97	492942	10.0	9.45	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	289977	10.0	9.58	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	408355	10.0	9.34	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	282319	10.0	9.73	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	85	41982	10.0	9.12	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	94	139512	10.0	8.73	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	49088	10.0	8.03	
117 Naphthalene	128	12.195	12.195	0.000	97	470264	10.0	8.89	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	96	131236	10.0	8.92	
S 124 Trihalomethanes, Total	1				0		40.0	42.4	
S 125 Total BTEX	1				0		50.0	50.6	
S 126 1,2-Dichloroethene, Total	96				0			21.7	
S 127 1,3-Dichloropropene, Total	75				0			20.7	
S 128 Xylenes, Total	106				0		20.0	19.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	8.00	Units: uL
vmarolistdw_00352	Amount Added:	8.00	Units: uL
vmrprimw_00394	Amount Added:	8.00	Units: uL
vm50ss_00410	Amount Added:	8.00	Units: uL

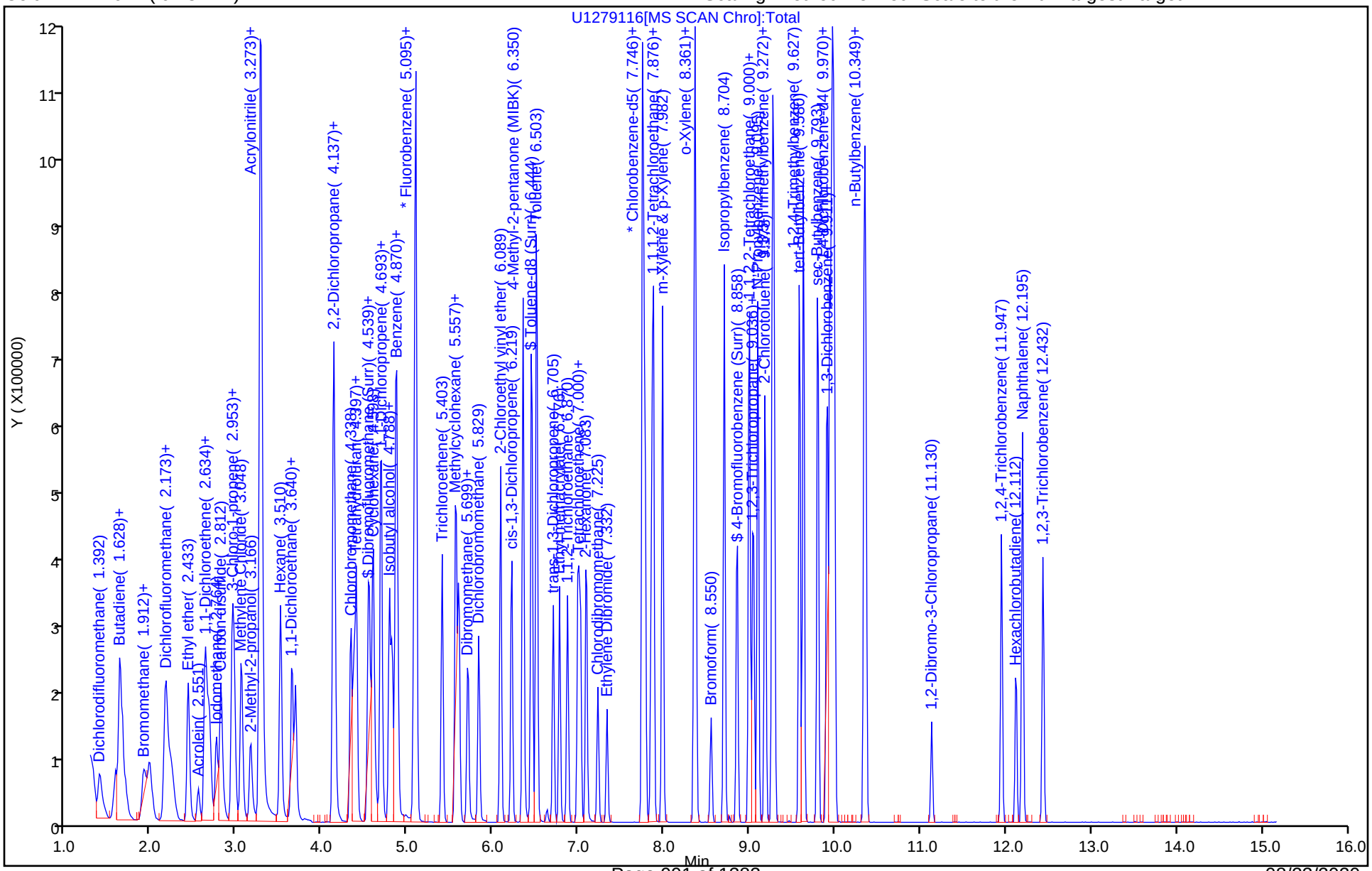
Report Date: 16-Jul-2020 21:24:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279116.D

Injection Date:	16-Jul-2020 18:50:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L4			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

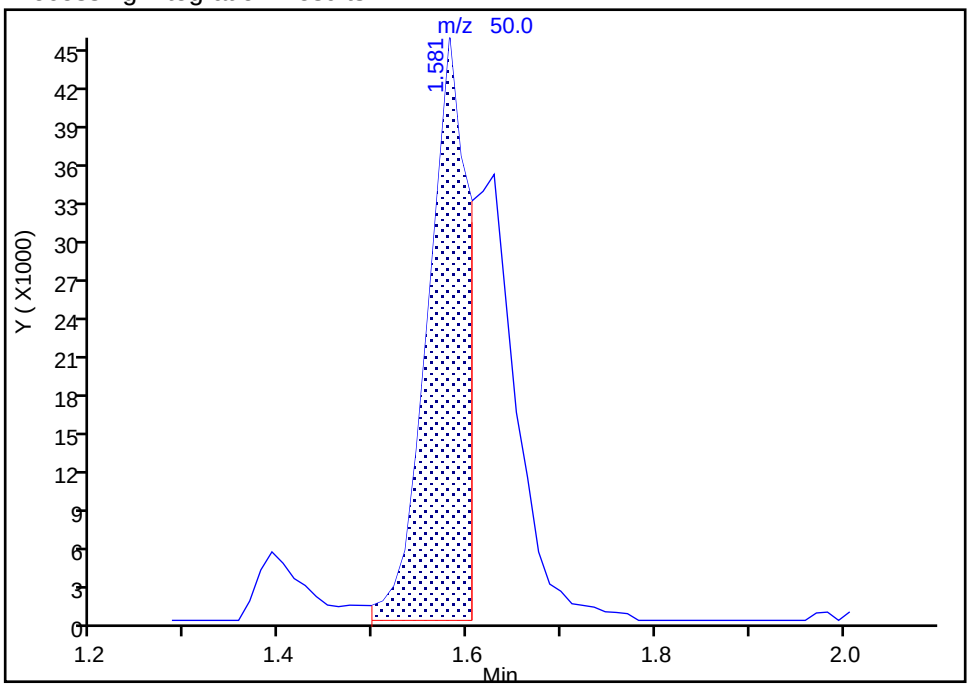
Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279116.D
Injection Date: 16-Jul-2020 18:50:30 Instrument ID: A3UX12
Lims ID: std8260 L4
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

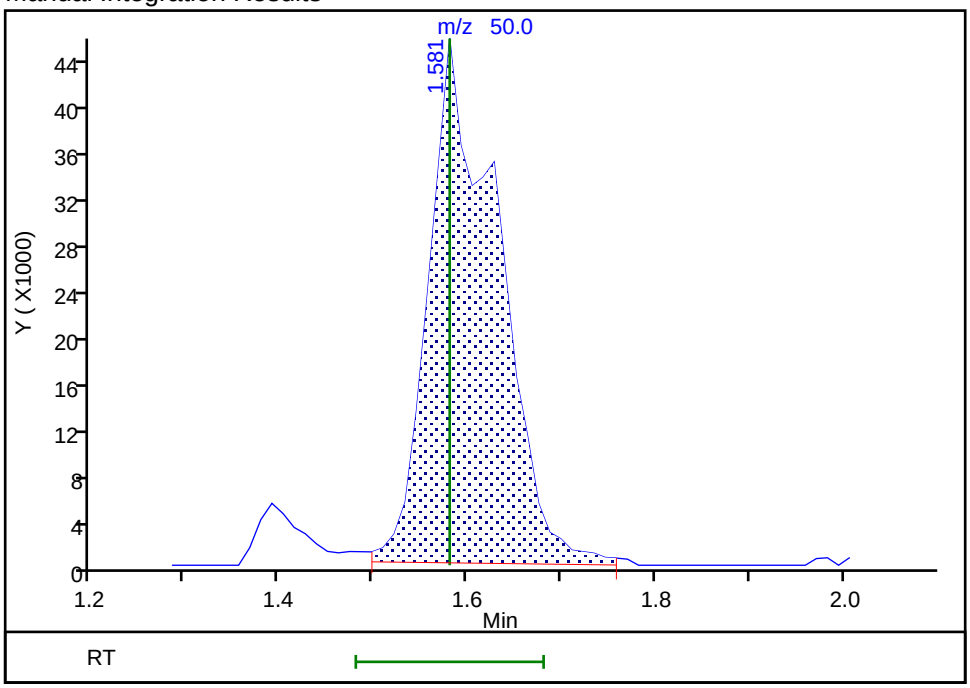
Processing Integration Results

RT: 1.58
Area: 139411
Amount: 6.632730
Amount Units: ug/l



Manual Integration Results

RT: 1.58
Area: 233672
Amount: 9.926891
Amount Units: ug/l



Reviewer: laveyt, 16-Jul-2020 19:12:04
Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279117.D
Lims ID: ICIS L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 16-Jul-2020 19:12:30 ALS Bottle#: 9 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-013
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:24:13 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 19:32:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	930091	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	747849	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	92	400649	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	289228	20.0	23.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.823	0.000	96	345986	20.0	22.9	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	858996	20.0	17.0	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	95	344224	20.0	19.9	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	325891	20.0	22.4	
10 Chloromethane	50	1.605	1.605	0.000	99	562073	20.0	22.8	
11 Butadiene	54	1.652	1.652	0.000	90	390394	20.0	22.8	
12 Vinyl chloride	62	1.687	1.687	0.000	98	406302	20.0	23.3	
14 Bromomethane	94	1.936	1.936	0.000	91	265909	20.0	23.0	
15 Chloroethane	64	1.995	1.995	0.000	100	285493	20.0	22.5	
16 Dichlorofluoromethane	67	2.184	2.184	0.000	97	626381	20.0	23.7	
17 Trichlorofluoromethane	101	2.184	2.184	0.000	98	455578	20.0	22.4	
19 Ethyl ether	59	2.445	2.445	0.000	92	309400	20.0	21.9	
20 Acrolein	56	2.563	2.563	0.000	98	118799	100.0	97.6	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	390469	20.0	20.9	
22 112TCTFE	101	2.670	2.670	0.000	94	233909	20.0	21.3	
23 Acetone	43	2.693	2.693	0.000	100	224375	40.0	37.9	
24 Iodomethane	142	2.776	2.776	0.000	98	421954	20.0	22.2	
25 Carbon disulfide	76	2.823	2.823	0.000	100	789675	20.0	21.0	
27 3-Chloro-1-propene	41	2.954	2.954	0.000	90	431804	20.0	20.6	
28 Methyl acetate	43	2.977	2.977	0.000	97	577598	40.0	40.5	
29 Methylene Chloride	49	3.060	3.060	0.000	94	354472	20.0	20.7	
30 2-Methyl-2-propanol	59	3.167	3.167	0.000	99	349742	200.0	198.0	
31 Acrylonitrile	53	3.285	3.285	0.000	99	1450393	200.0	196.3	
32 trans-1,2-Dichloroethene	61	3.297	3.297	0.000	66	381398	20.0	21.3	
33 Methyl tert-butyl ether	73	3.297	3.297	0.000	95	848635	20.0	20.6	
34 Hexane	57	3.522	3.522	0.000	92	367216	20.0	18.5	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	494235	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.699	3.699	0.000	97	615701	20.0	18.3	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	62	363126	20.0	22.1	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	83	358669	20.0	21.4	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	100	122791	40.0	41.8	
46 Chlorobromomethane	49	4.338	4.338	0.000	97	316652	20.0	23.3	
47 Tetrahydrofuran	42	4.374	4.374	0.000	88	347004	40.0	46.3	
48 Chloroform	83	4.409	4.409	0.000	94	555952	20.0	23.5	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	98	439960	20.0	23.4	
50 Cyclohexane	84	4.598	4.598	0.000	91	486792	20.0	21.9	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	94	453544	20.0	23.7	
52 Carbon tetrachloride	117	4.693	4.693	0.000	79	360797	20.0	23.6	
53 Isobutyl alcohol	41	4.788	4.788	0.000	97	405480	500.0	540.5	
54 Benzene	78	4.870	4.870	0.000	96	1321740	20.0	23.1	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	418240	20.0	22.5	
57 n-Heptane	57	5.072	5.083	-0.011	90	175083	20.0	16.7	
59 Trichloroethene	130	5.403	5.403	0.000	96	269336	20.0	20.9	
61 Methylcyclohexane	83	5.569	5.569	0.000	89	426646	20.0	18.9	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	92	239320	20.0	19.4	
65 1,4-Dioxane	88	5.711	5.711	0.000	93	59715	400.0	371.3	
64 Dibromomethane	174	5.711	5.711	0.000	93	176342	20.0	20.1	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	300932	20.0	19.5	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	343008	40.0	36.9	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	367344	20.0	18.8	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	731356	40.0	36.2	
71 Toluene	91	6.515	6.515	0.000	99	1007024	20.0	16.2	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	95	332918	20.0	16.6	
74 Ethyl methacrylate	69	6.776	6.776	0.000	89	345274	20.0	17.0	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	233957	20.0	19.3	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	273224	20.0	18.4	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	457272	20.0	20.1	
78 2-Hexanone	43	7.095	7.095	0.000	96	708445	40.0	43.6	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	229325	20.0	19.2	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	244506	20.0	19.5	
83 Chlorobenzene	112	7.781	7.781	0.000	94	715039	20.0	19.7	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	94	247781	20.0	20.0	
85 Ethylbenzene	106	7.876	7.876	0.000	99	403913	20.0	20.3	
86 m-Xylene & p-Xylene	106	7.983	7.983	0.000	99	505494	20.0	20.5	
87 o-Xylene	106	8.361	8.361	0.000	97	502115	20.0	19.8	
88 Styrene	104	8.373	8.373	0.000	96	819248	20.0	20.1	
89 Bromoform	173	8.551	8.551	0.000	97	164608	20.0	20.0	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	1271237	20.0	20.0	
92 Bromobenzene	156	9.000	9.000	0.000	94	292641	20.0	18.7	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	85	394582	20.0	19.7	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	86	134177	20.0	19.4	
95 trans-1,4-Dichloro-2-butene	53	9.048	9.048	0.000	91	121536	20.0	20.7	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	335308	20.0	19.7	
97 2-Chlorotoluene	126	9.178	9.178	0.000	96	288795	20.0	19.2	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	999122	20.0	19.9	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	288403	20.0	18.7	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	832037	20.0	18.9	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	1004174	20.0	19.0	
105 sec-Butylbenzene	105	9.793	9.793	0.000	95	1203086	20.0	18.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	554995	20.0	18.7	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	1033800	20.0	19.5	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	94	569022	20.0	18.5	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	888801	20.0	20.0	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	572071	20.0	19.4	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	86	85539	20.0	18.3	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	94	280319	20.0	17.3	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	104077	20.0	16.7	
117 Naphthalene	128	12.195	12.195	0.000	97	959515	20.0	17.8	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	94	260445	20.0	17.4	
S 124 Trihalomethanes, Total	1				0		80.0	82.2	
S 125 Total BTEX	1				0		100.0	99.9	
S 128 Xylenes, Total	106				0		40.0	40.3	

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	16.00	Units: uL
vmarolistdw_00352	Amount Added:	16.00	Units: uL
vmrprimw_00394	Amount Added:	16.00	Units: uL
vm50ss_00410	Amount Added:	16.00	Units: uL

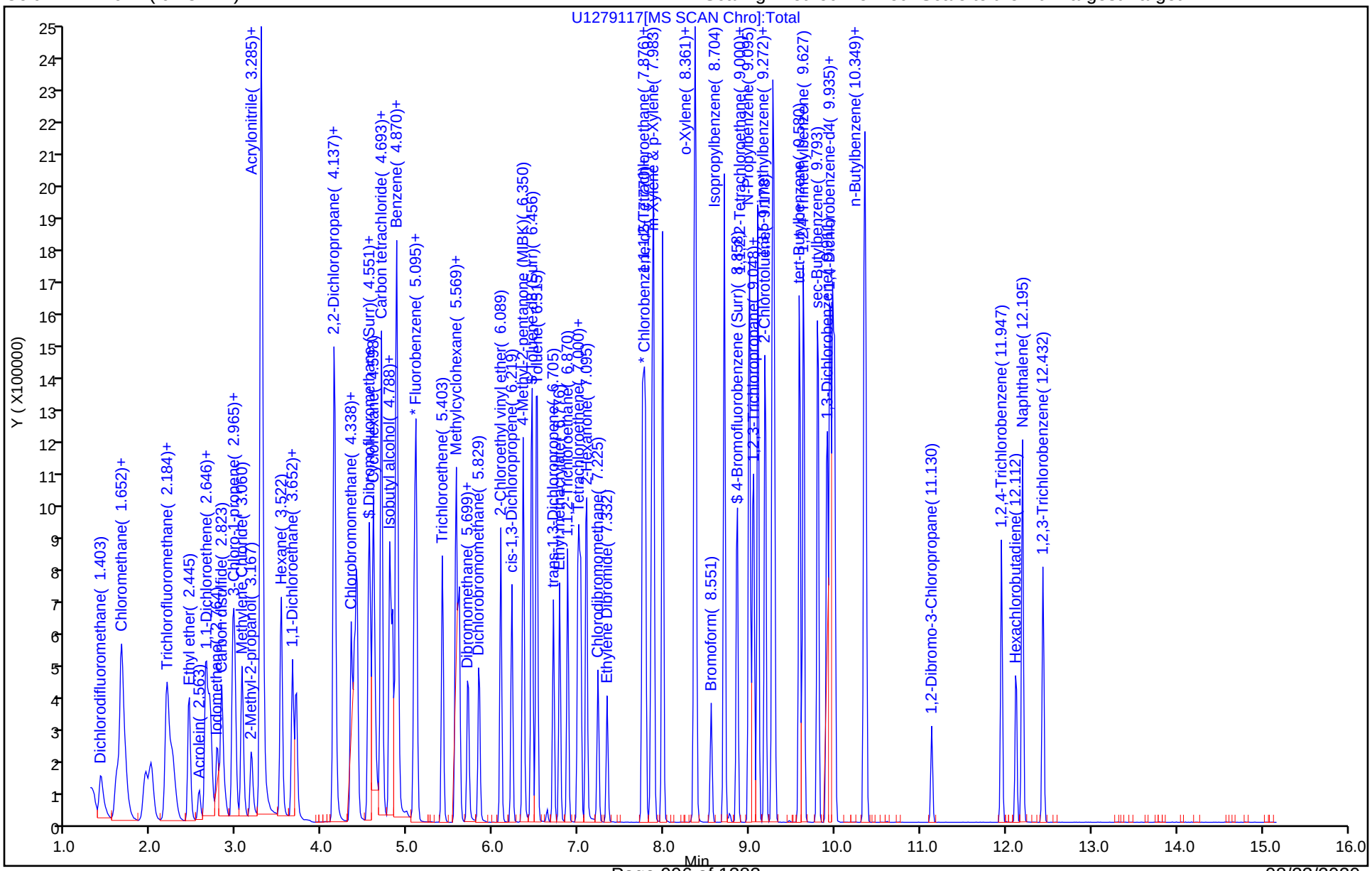
Report Date: 16-Jul-2020 21:24:17 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279117.D

Injection Date:	16-Jul-2020 19:12:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	ICIS L5			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279118.D
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Jul-2020 19:35:30 ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-014
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:24:23 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 20:24:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1105939	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	86	819483	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	94	386745	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	594419	40.0	40.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.823	0.000	96	729798	40.0	40.6	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	1808749	40.0	32.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	94	712692	40.0	37.6	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	692065	40.0	40.1	
10 Chloromethane	50	1.593	1.605	-0.012	99	1048531	40.0	35.7	
11 Butadiene	54	1.652	1.652	0.000	89	740602	40.0	36.4	
12 Vinyl chloride	62	1.687	1.687	0.000	98	763156	40.0	36.9	
14 Bromomethane	94	1.936	1.936	0.000	91	502951	40.0	36.7	
15 Chloroethane	64	1.995	1.995	0.000	99	555402	40.0	36.9	
16 Dichlorofluoromethane	67	2.173	2.184	-0.011	97	1157160	40.0	36.8	
17 Trichlorofluoromethane	101	2.184	2.184	0.000	98	908548	40.0	37.5	
19 Ethyl ether	59	2.433	2.445	-0.012	92	663810	40.0	39.5	
20 Acrolein	56	2.551	2.563	-0.012	99	265086	200.0	183.2	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	829316	40.0	37.3	
22 112TCTFE	101	2.670	2.670	0.000	94	518516	40.0	39.7	
23 Acetone	43	2.693	2.693	0.000	100	503096	80.0	71.5	
24 Iodomethane	142	2.764	2.776	-0.012	98	864362	40.0	38.2	
25 Carbon disulfide	76	2.823	2.823	0.000	99	1654881	40.0	37.0	
27 3-Chloro-1-propene	41	2.954	2.954	0.000	89	902635	40.0	36.2	
28 Methyl acetate	43	2.977	2.977	0.000	97	1278569	80.0	75.4	
29 Methylene Chloride	49	3.060	3.060	0.000	92	737052	40.0	36.3	
30 2-Methyl-2-propanol	59	3.178	3.167	0.011	99	844343	400.0	402.0	
31 Acrylonitrile	53	3.285	3.285	0.000	98	3202437	400.0	364.6	
32 trans-1,2-Dichloroethene	61	3.285	3.297	-0.012	99	806228	40.0	37.8	
33 Methyl tert-butyl ether	73	3.297	3.297	0.000	96	1825802	40.0	37.3	
34 Hexane	57	3.521	3.522	-0.001	91	877095	40.0	37.1	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	1020403	40.0	35.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.699	-0.012	97	1471981	40.0	36.7	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	83	743747	40.0	37.4	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	60	734903	40.0	37.7	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	100	283584	80.0	81.2	
46 Chlorobromomethane	49	4.338	4.338	0.000	97	650336	40.0	40.2	
47 Tetrahydrofuran	42	4.373	4.374	-0.001	87	730197	80.0	82.0	
48 Chloroform	83	4.409	4.409	0.000	94	1111892	40.0	39.5	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	944576	40.0	42.3	
50 Cyclohexane	84	4.598	4.598	0.000	91	1121049	40.0	42.4	
52 Carbon tetrachloride	117	4.693	4.693	0.000	77	782108	40.0	43.0	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	95	995105	40.0	43.8	
53 Isobutyl alcohol	41	4.788	4.788	0.000	95	989777	1000.0	1109.6	
54 Benzene	78	4.870	4.870	0.000	96	2810699	40.0	41.4	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	914197	40.0	41.4	
57 n-Heptane	57	5.072	5.083	-0.011	93	470133	40.0	42.0	
59 Trichloroethene	130	5.403	5.403	0.000	97	580360	40.0	37.8	
61 Methylcyclohexane	83	5.569	5.569	0.000	87	988563	40.0	36.8	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	92	529883	40.0	36.1	
64 Dibromomethane	174	5.711	5.711	0.000	94	382258	40.0	36.7	
65 1,4-Dioxane	88	5.711	5.711	0.000	96	136471	800.0	713.6	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	682191	40.0	37.2	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	788544	80.0	71.4	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	856087	40.0	36.9	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	1639242	80.0	68.3	
71 Toluene	91	6.515	6.515	0.000	99	2206110	40.0	32.4	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	95	762783	40.0	34.6	
74 Ethyl methacrylate	69	6.776	6.776	0.000	89	787358	40.0	35.4	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	449059	40.0	33.7	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	564371	40.0	34.7	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	828517	40.0	33.2	
78 2-Hexanone	43	7.095	7.095	0.000	94	1134947	80.0	63.7	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	540110	40.0	41.3	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	572080	40.0	41.6	
83 Chlorobenzene	112	7.781	7.781	0.000	95	1635971	40.0	41.2	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	94	565680	40.0	41.7	
85 Ethylbenzene	106	7.876	7.876	0.000	99	887653	40.0	40.7	
86 m-Xylene & p-Xylene	106	7.982	7.983	-0.001	99	1150536	40.0	42.6	
87 o-Xylene	106	8.361	8.361	0.000	97	1085881	40.0	39.0	
88 Styrene	104	8.373	8.373	0.000	96	1807037	40.0	40.4	
89 Bromoform	173	8.550	8.551	-0.001	97	363030	40.0	40.2	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	2727885	40.0	39.1	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	843951	40.0	43.6	
92 Bromobenzene	156	9.000	9.000	0.000	94	625073	40.0	41.4	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	85	277742	40.0	41.6	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.048	-0.001	94	268293	40.0	47.4	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	722462	40.0	43.9	
97 2-Chlorotoluene	126	9.189	9.178	0.011	97	610825	40.0	42.1	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	2114062	40.0	43.6	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	615770	40.0	41.3	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	1833625	40.0	43.2	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	2152543	40.0	42.3	
105 sec-Butylbenzene	105	9.793	9.793	0.000	95	2628984	40.0	42.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	1164577	40.0	40.6	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	2242296	40.0	43.8	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	1187495	40.0	40.0	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	1902978	40.0	44.3	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	97	1152915	40.0	40.5	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	85	206406	40.0	45.7	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	94	673976	40.0	43.0	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	244373	40.0	40.7	
117 Naphthalene	128	12.195	12.195	0.000	97	2378356	40.0	45.8	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	95	619750	40.0	42.9	
S 124 Trihalomethanes, Total	1				0		160.0	158.3	
S 125 Total BTEX	1				0		200.0	196.1	
S 126 1,2-Dichloroethene, Total	96				0			75.2	
S 127 1,3-Dichloropropene, Total	75				0			71.5	
S 128 Xylenes, Total	106				0		80.0	81.6	

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	32.00	Units: uL
vmarolistdw_00352	Amount Added:	32.00	Units: uL
vmrprimw_00394	Amount Added:	32.00	Units: uL
vm50ss_00410	Amount Added:	32.00	Units: uL

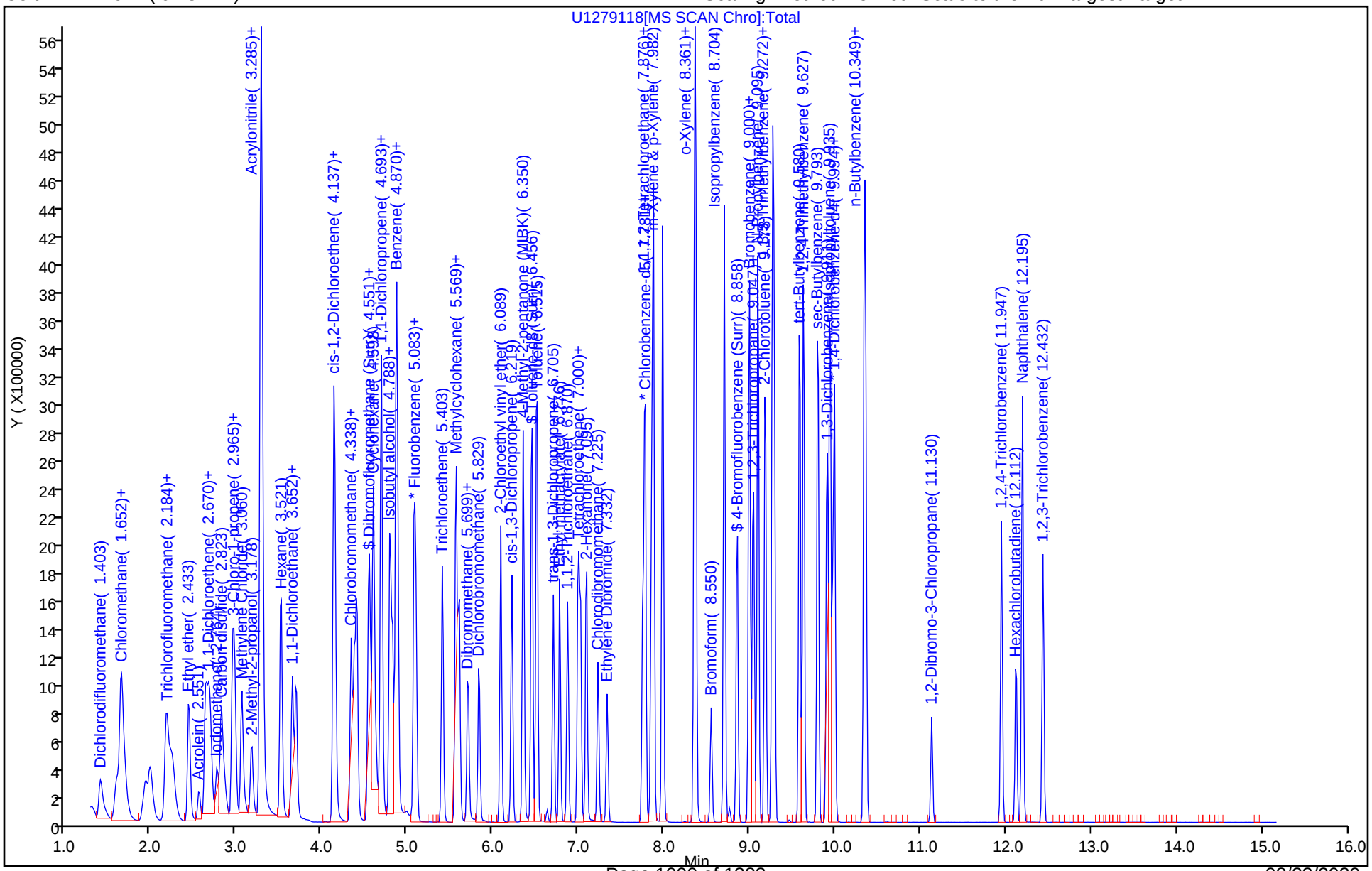
Report Date: 16-Jul-2020 21:24:27 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279118.D

Injection Date:	16-Jul-2020 19:35:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L6			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279119.D
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Jul-2020 19:57:30 ALS Bottle#: 11 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-015
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:24:33 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 20:26:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	975916	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	86	701214	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	94	404097	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	770621	60.0	59.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.823	0.000	96	927672	60.0	58.5	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	3239682	60.0	68.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	96	963194	60.0	59.3	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	952192	60.0	62.5	
10 Chloromethane	50	1.605	1.605	0.000	98	1437896	60.0	55.5	
11 Butadiene	54	1.640	1.652	-0.012	87	988134	60.0	55.0	
12 Vinyl chloride	62	1.687	1.687	0.000	98	1049031	60.0	57.4	
14 Bromomethane	94	1.936	1.936	0.000	91	779653	60.0	64.4	
15 Chloroethane	64	1.995	1.995	0.000	100	898507	60.0	67.6	
16 Dichlorofluoromethane	67	2.173	2.184	-0.011	97	1769403	60.0	63.8	
17 Trichlorofluoromethane	101	2.184	2.184	0.000	98	1377516	60.0	64.5	
19 Ethyl ether	59	2.445	2.445	0.000	91	908584	60.0	61.3	
20 Acrolein	56	2.551	2.563	-0.012	99	397800	300.0	311.5	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	96	1279374	60.0	65.2	
22 112TCTFE	101	2.670	2.670	0.000	95	807578	60.0	70.1	
23 Acetone	43	2.693	2.693	0.000	100	661546	120.0	106.5	
24 Iodomethane	142	2.764	2.776	-0.012	98	1310816	60.0	65.7	
25 Carbon disulfide	76	2.823	2.823	0.000	99	2555816	60.0	64.7	
27 3-Chloro-1-propene	41	2.954	2.954	0.000	89	1389182	60.0	63.1	
28 Methyl acetate	43	2.977	2.977	0.000	97	1839288	120.0	123.0	
29 Methylene Chloride	49	3.060	3.060	0.000	93	1116320	60.0	62.3	
30 2-Methyl-2-propanol	59	3.178	3.167	0.011	99	1032059	600.0	556.8	
31 Acrylonitrile	53	3.273	3.285	-0.012	99	5396310	600.0	696.2	
32 trans-1,2-Dichloroethene	61	3.285	3.297	-0.012	99	1472482	60.0	78.2	
33 Methyl tert-butyl ether	73	3.297	3.297	0.000	96	3196991	60.0	73.9	
34 Hexane	57	3.510	3.522	-0.012	92	1578677	60.0	75.7	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	1798158	60.0	71.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.699	3.699	0.000	97	2596721	60.0	73.4	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	83	1130637	60.0	64.4	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	60	1140347	60.0	66.3	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	100	421345	120.0	136.8	
46 Chlorobromomethane	49	4.338	4.338	0.000	97	802370	60.0	56.2	
47 Tetrahydrofuran	42	4.373	4.374	-0.001	86	833693	120.0	106.0	
48 Chloroform	83	4.409	4.409	0.000	94	1462582	60.0	58.9	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	1231118	60.0	62.5	
50 Cyclohexane	84	4.598	4.598	0.000	90	1431075	60.0	61.4	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	94	1215722	60.0	60.6	
52 Carbon tetrachloride	117	4.693	4.693	0.000	80	1029542	60.0	64.2	
53 Isobutyl alcohol	41	4.788	4.788	0.000	94	1065136	1500.0	1353.1	
54 Benzene	78	4.870	4.870	0.000	96	3469151	60.0	57.9	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	1156634	60.0	59.4	
57 n-Heptane	57	5.072	5.083	-0.011	92	552977	60.0	57.1	
59 Trichloroethene	130	5.403	5.403	0.000	97	873131	60.0	64.5	
61 Methylcyclohexane	83	5.569	5.569	0.000	88	1496196	60.0	63.1	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	92	791730	60.0	61.2	
65 1,4-Dioxane	88	5.711	5.711	0.000	94	224221	1200.0	1328.6	
64 Dibromomethane	174	5.711	5.711	0.000	94	658845	60.0	71.7	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	1164000	60.0	72.0	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	1519041	120.0	155.9	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	1572803	60.0	76.8	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	2878867	120.0	135.9	
71 Toluene	91	6.515	6.515	0.000	99	3857470	60.0	66.3	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	95	1347764	60.0	71.5	
74 Ethyl methacrylate	69	6.776	6.776	0.000	90	1381887	60.0	72.7	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	791429	60.0	69.5	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	940315	60.0	67.5	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	1400884	60.0	65.5	
78 2-Hexanone	43	7.095	7.095	0.000	95	2182766	120.0	143.1	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	784117	60.0	70.0	
81 Ethylene Dibromide	107	7.332	7.332	0.000	99	724976	60.0	61.6	
83 Chlorobenzene	112	7.781	7.781	0.000	95	2073291	60.0	61.0	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	94	758714	60.0	65.4	
85 Ethylbenzene	106	7.876	7.876	0.000	99	1164276	60.0	62.3	
86 m-Xylene & p-Xylene	106	7.983	7.983	0.000	99	1462696	60.0	63.2	
87 o-Xylene	106	8.361	8.361	0.000	97	1432342	60.0	60.1	
88 Styrene	104	8.373	8.373	0.000	95	2377113	60.0	62.2	
89 Bromoform	173	8.551	8.551	-0.001	97	525428	60.0	68.1	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	3621536	60.0	60.7	
92 Bromobenzene	156	9.000	9.000	0.000	92	897214	60.0	56.8	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	85	1087689	60.0	53.8	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	86	378143	60.0	54.3	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.048	-0.001	92	349603	60.0	59.1	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	1004987	60.0	58.5	
97 2-Chlorotoluene	126	9.189	9.178	0.011	97	844827	60.0	55.7	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	2867428	60.0	56.6	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	864927	60.0	55.6	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	2488936	60.0	56.1	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	2868200	60.0	53.9	
105 sec-Butylbenzene	105	9.805	9.793	0.012	94	3983089	60.0	61.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	1762350	60.0	58.8	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	3408231	60.0	63.7	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	94	1832355	60.0	59.0	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	2930188	60.0	65.3	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	97	1768141	60.0	59.4	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	87	286949	60.0	60.8	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	93	899204	60.0	54.9	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	342826	60.0	54.7	
117 Naphthalene	128	12.195	12.195	0.000	97	3047517	60.0	56.2	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	95	842599	60.0	55.8	
S 124 Trihalomethanes, Total	1				0		240.0	269.0	
S 125 Total BTEX	1				0		300.0	309.9	
S 126 1,2-Dichloroethene, Total	96				0			142.6	
S 127 1,3-Dichloropropene, Total	75				0			148.3	
S 128 Xylenes, Total	106				0		120.0	123.4	

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	48.00	Units: uL
vmarolistdw_00352	Amount Added:	48.00	Units: uL
vmrprimw_00394	Amount Added:	48.00	Units: uL
vm50ss_00410	Amount Added:	48.00	Units: uL

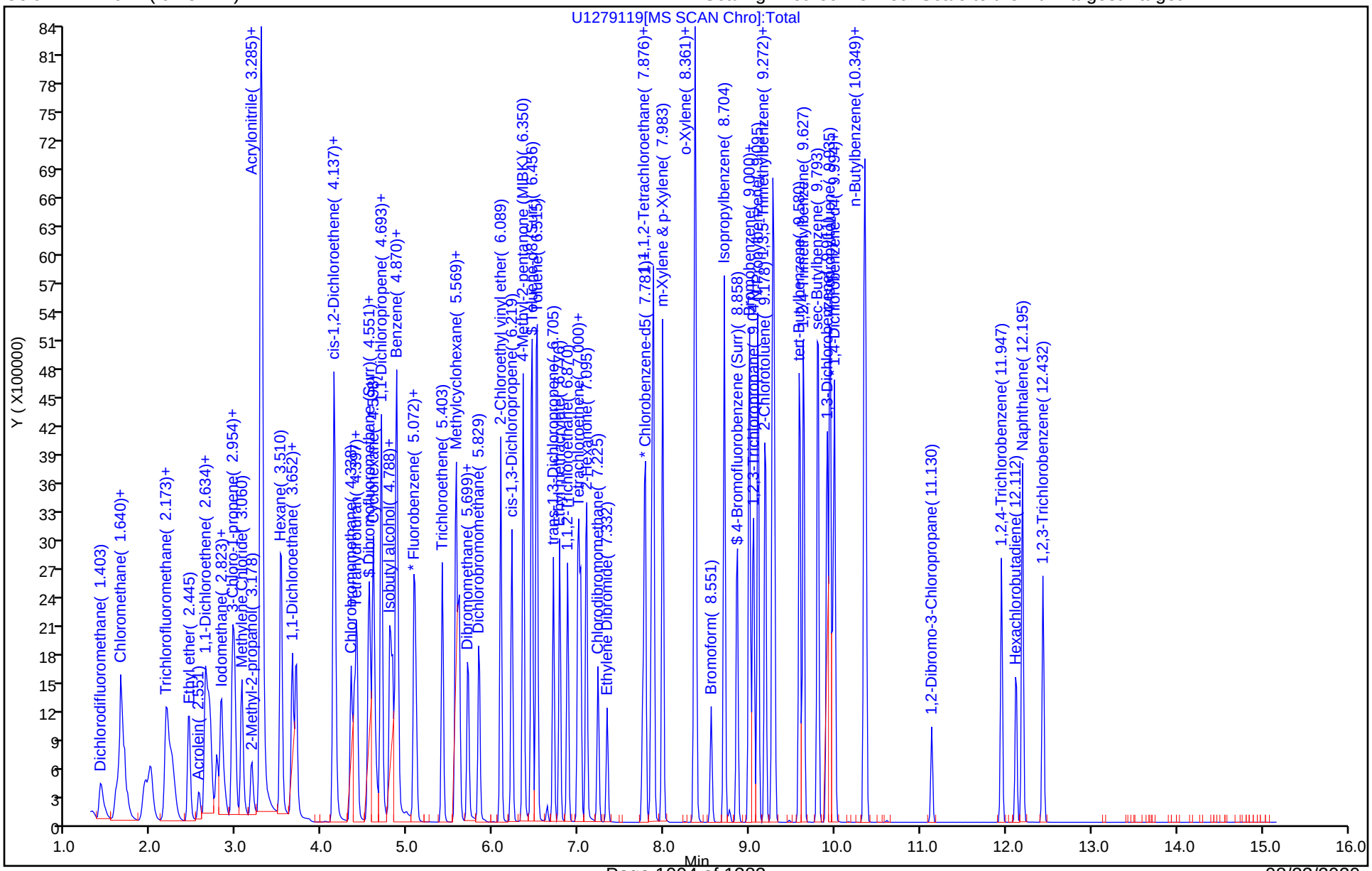
Report Date: 16-Jul-2020 21:24:37 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279119.D

Injection Date:	16-Jul-2020 19:57:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L7			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D
Lims ID: std8260 L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Jul-2020 20:20:30 ALS Bottle#: 12 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-016
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 21:24:44 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1057

First Level Reviewer: laveyt Date: 16-Jul-2020 20:40:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1144678	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	716433	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.000	92	359893	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	1043625	80.0	68.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.823	0.000	98	1255009	80.0	67.5	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	4317396	80.0	89.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	95	1438809	80.0	86.7	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	1447911	80.0	81.0	
10 Chloromethane	50	1.605	1.605	0.000	99	2259568	80.0	74.3	
11 Butadiene	54	1.640	1.652	-0.012	88	1636623	80.0	77.7	
12 Vinyl chloride	62	1.687	1.687	0.000	97	1624267	80.0	75.8	
14 Bromomethane	94	1.936	1.936	0.000	91	1045526	80.0	73.6	
15 Chloroethane	64	1.995	1.995	0.000	100	1187806	80.0	76.2	
16 Dichlorofluoromethane	67	2.173	2.184	-0.011	97	2362624	80.0	72.6	
17 Trichlorofluoromethane	101	2.244	2.184	0.060	98	1880748	80.0	75.1	
19 Ethyl ether	59	2.433	2.445	-0.012	93	1303305	80.0	75.0	
20 Acrolein	56	2.551	2.563	-0.012	99	590629	400.0	394.3	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	97	1718675	80.0	74.7	
22 112TCTFE	101	2.670	2.670	0.000	94	1072209	80.0	79.3	
23 Acetone	43	2.693	2.693	0.000	100	896587	160.0	123.0	
24 Iodomethane	142	2.764	2.776	-0.012	98	1766617	80.0	75.5	
25 Carbon disulfide	76	2.812	2.823	-0.011	100	3433316	80.0	74.1	
27 3-Chloro-1-propene	41	2.942	2.954	-0.012	89	1869760	80.0	72.4	
28 Methyl acetate	43	2.977	2.977	0.000	97	2463274	160.0	140.4	
29 Methylene Chloride	49	3.060	3.060	0.000	94	1496408	80.0	71.2	
30 2-Methyl-2-propanol	59	3.178	3.167	0.011	99	1383065	800.0	636.2	
31 Acrylonitrile	53	3.285	3.285	0.000	98	6068696	800.0	667.5	
32 trans-1,2-Dichloroethene	61	3.285	3.297	-0.012	97	1666148	80.0	75.4	
33 Methyl tert-butyl ether	73	3.297	3.297	0.000	97	3813820	80.0	75.2	
34 Hexane	57	3.510	3.522	-0.012	92	2087141	80.0	85.3	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	2432150	80.0	82.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.699	-0.012	97	3734074	80.0	90.0	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	82	1294590	80.0	62.9	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	61	1274490	80.0	63.1	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	448875	160.0	124.3	
46 Chlorobromomethane	49	4.338	4.338	0.000	97	1035588	80.0	61.8	
47 Tetrahydrofuran	42	4.374	4.374	0.000	86	1096878	160.0	118.9	
48 Chloroform	83	4.409	4.409	0.000	94	1957485	80.0	67.2	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	1655131	80.0	71.6	
50 Cyclohexane	84	4.598	4.598	0.000	90	1863865	80.0	68.1	
52 Carbon tetrachloride	117	4.693	4.693	0.000	79	1403246	80.0	74.6	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	94	1634304	80.0	69.5	
53 Isobutyl alcohol	41	4.800	4.788	0.012	94	1406970	2000.0	1523.9	
54 Benzene	78	4.871	4.870	0.000	96	4691183	80.0	66.8	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	1556959	80.0	68.2	
57 n-Heptane	57	5.072	5.083	-0.011	94	953448	80.0	85.6	
59 Trichloroethene	130	5.403	5.403	0.000	97	1298374	80.0	81.7	
61 Methylcyclohexane	83	5.569	5.569	0.000	91	2376794	80.0	85.4	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	94	1315984	80.0	86.7	
64 Dibromomethane	174	5.711	5.711	0.000	95	821478	80.0	76.3	
65 1,4-Dioxane	88	5.711	5.711	0.000	95	304656	1600.0	1539.1	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	1575297	80.0	83.1	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	2001081	160.0	175.1	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	2110296	80.0	87.9	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	4104472	160.0	165.2	
71 Toluene	91	6.515	6.515	0.000	99	5188385	80.0	87.3	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	94	1901312	80.0	98.7	
74 Ethyl methacrylate	69	6.776	6.776	0.000	90	1870176	80.0	96.3	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	1039659	80.0	89.3	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	1237632	80.0	87.0	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	2025809	80.0	92.8	
78 2-Hexanone	43	7.095	7.095	0.000	94	2630745	160.0	168.8	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	1056327	80.0	92.3	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	1076276	80.0	89.4	
83 Chlorobenzene	112	7.781	7.781	0.000	94	2758216	80.0	79.4	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	94	997800	80.0	84.2	
85 Ethylbenzene	106	7.876	7.876	0.000	99	1563228	80.0	81.9	
86 m-Xylene & p-Xylene	106	7.983	7.983	0.000	99	1951120	80.0	82.6	
87 o-Xylene	106	8.361	8.361	0.000	96	1945281	80.0	79.9	
88 Styrene	104	8.373	8.373	0.000	95	3253865	80.0	83.3	
89 Bromoform	173	8.551	8.551	0.000	97	723239	80.0	91.7	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	4849848	80.0	79.5	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	1682800	80.0	93.5	
92 Bromobenzene	156	9.000	9.000	0.000	92	1336195	80.0	95.0	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	85	543257	80.0	87.5	
95 trans-1,4-Dichloro-2-butene	53	9.048	9.048	0.000	94	508069	80.0	96.5	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	1447539	80.0	94.6	
97 2-Chlorotoluene	126	9.190	9.178	0.012	97	1259021	80.0	93.2	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	97	4279171	80.0	94.8	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	1291849	80.0	93.2	
102 tert-Butylbenzene	119	9.592	9.580	0.012	92	3711556	80.0	94.0	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	4329767	80.0	91.3	
105 sec-Butylbenzene	105	9.805	9.793	0.012	94	4715586	80.0	82.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	2158288	80.0	80.8	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	4040650	80.0	84.8	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	2187419	80.0	79.1	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	3326661	80.0	83.3	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	2080580	80.0	78.5	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	87	380957	80.0	90.6	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	94	1243231	80.0	85.2	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	96	465852	80.0	83.4	
117 Naphthalene	128	12.195	12.195	0.000	97	4209448	80.0	87.1	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	96	1197429	80.0	89.1	
S 124 Trihalomethanes, Total	1				0		320.0	334.3	
S 125 Total BTEX	1				0		400.0	398.4	
S 126 1,2-Dichloroethene, Total	96				0			138.3	
S 127 1,3-Dichloropropene, Total	75				0			186.6	
S 128 Xylenes, Total	106				0		160.0	162.5	

Reagents:

vm50is_stk_a_00006	Amount Added:	2.00	Units: uL
VMRGAS_00347	Amount Added:	64.00	Units: uL
vmarolistdw_00352	Amount Added:	64.00	Units: uL
vmrprimw_00394	Amount Added:	64.00	Units: uL
vm50ss_00410	Amount Added:	64.00	Units: uL

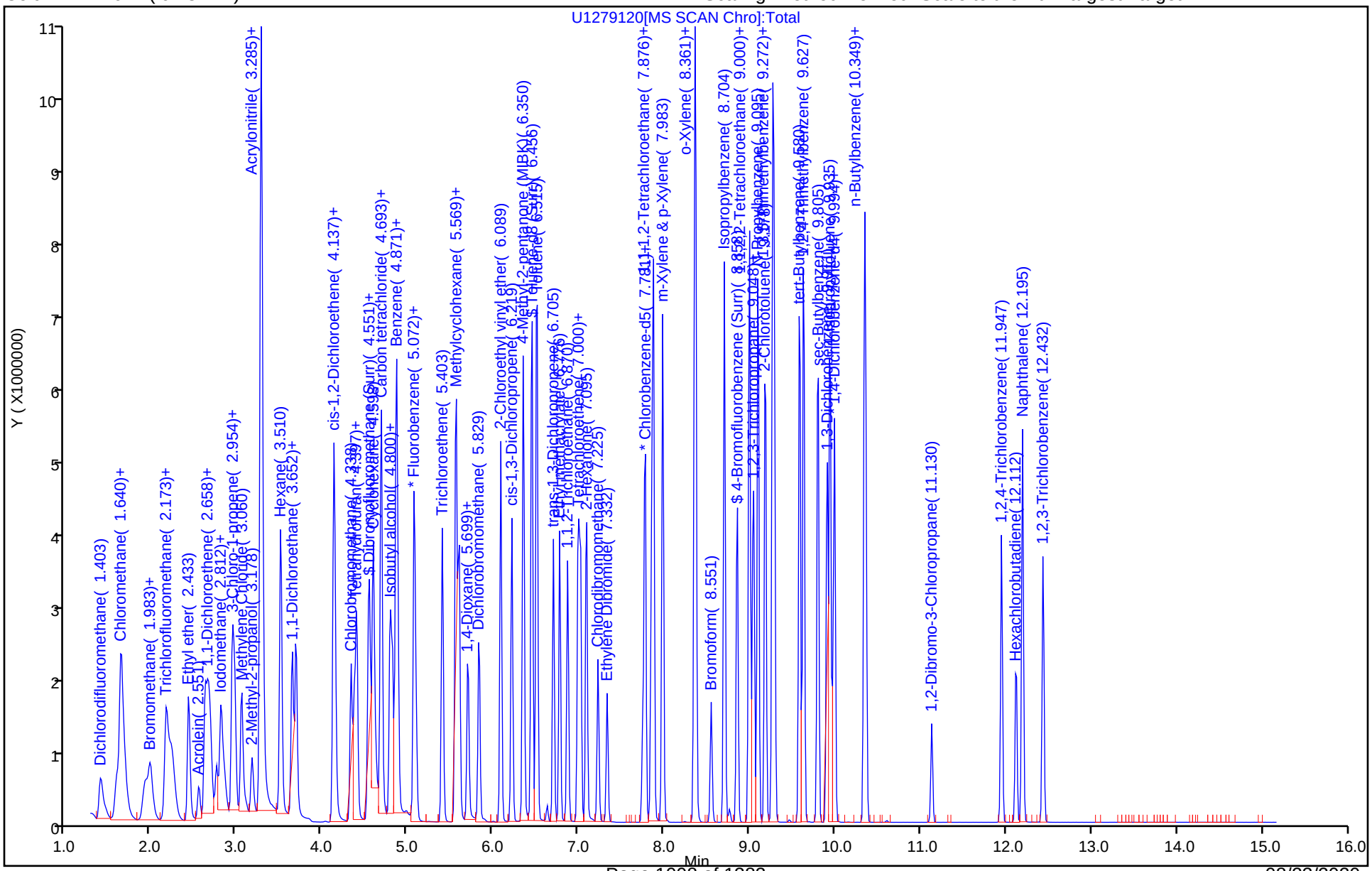
Report Date: 16-Jul-2020 21:24:48 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Injection Date:	16-Jul-2020 20:20:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	std8260 L8			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337766

SDG No.: MSA Frog Mortar Creek

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				

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900783.d
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jul-2018 17:50:49 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-002
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:29 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:42:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	94	975875	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	80	751089	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	65	427349	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.037	5.049	-0.012	62	957680	80.0	75.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.357	-0.012	90	970142	80.0	72.5	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	-0.001	92	3614422	80.0	79.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	92	1285631	80.0	74.0	
9 Dichlorodifluoromethane	85	1.610	1.622	-0.012	88	1522047	80.0	89.6	
10 Chloromethane	50	1.811	1.823	-0.012	81	1245553	80.0	75.7	
12 Butadiene	54	1.894	1.906	-0.012	88	1318121	80.0	82.4	
11 Vinyl chloride	62	1.918	1.930	-0.012	82	1317064	80.0	82.8	
13 Bromomethane	94	2.203	2.227	-0.024	90	848050	80.0	70.9	
14 Chloroethane	64	2.286	2.310	-0.024	86	723733	80.0	74.8	
15 Dichlorofluoromethane	67	2.487	2.511	-0.024	83	1706469	80.0	74.8	
16 Trichlorofluoromethane	101	2.559	2.582	-0.023	88	1728039	80.0	80.1	
17 Ethyl ether	59	2.796	2.820	-0.024	91	738330	80.0	76.2	
18 Acrolein	56	2.914	2.938	-0.024	93	1043418	400.0	409.9	
21 1,1-Dichloroethene	61	3.021	3.033	-0.012	90	1458107	80.0	78.9	
20 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.057	-0.012	83	1047375	80.0	79.5	
22 Acetone	43	3.068	3.080	-0.012	74	501797	160.0	156.1	
23 Iodomethane	142	3.175	3.199	-0.024	98	1772860	80.0	77.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.246	3.258	-0.012	98	3006958	80.0	72.8	
26 3-Chloro-1-propene	41	3.353	3.365	-0.012	83	1500878	80.0	77.5	
27 Methyl acetate	43	3.377	3.389	-0.012	97	1633788	160.0	147.8	
28 Methylene Chloride	49	3.472	3.484	-0.012	54	1113978	80.0	75.5	
29 2-Methyl-2-propanol	59	3.578	3.579	0.000	76	741744	800.0	616.8	
30 Acrylonitrile	53	3.685	3.697	-0.012	97	3868018	800.0	774.9	
32 trans-1,2-Dichloroethene	61	3.721	3.733	-0.012	80	1369327	80.0	75.3	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	69	2537900	80.0	74.9	
33 Hexane	57	3.970	3.982	-0.012	91	1614587	80.0	81.3	
34 1,1-Dichloroethane	63	4.100	4.112	-0.012	85	1701003	80.0	79.3	
35 Vinyl acetate	43	4.136	4.148	-0.012	97	1593713	80.0	81.7	
41 2-Butanone (MEK)	72	4.622	4.634	-0.012	64	297238	160.0	162.1	
39 2,2-Dichloropropane	77	4.622	4.634	-0.012	58	1027916	80.0	79.7	
40 cis-1,2-Dichloroethene	96	4.622	4.634	-0.012	68	1142993	80.0	76.0	
45 Chlorobromomethane	49	4.835	4.836	-0.001	71	714392	80.0	72.2	
46 Tetrahydrofuran	42	4.883	4.883	0.000	83	734202	160.0	154.9	
47 Chloroform	83	4.895	4.907	-0.012	68	1728769	80.0	77.7	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	89	1621508	80.0	80.9	
49 Cyclohexane	84	5.132	5.144	-0.012	87	1675220	80.0	79.8	
50 1,1-Dichloropropene	75	5.215	5.227	-0.012	92	1441115	80.0	79.0	
51 Carbon tetrachloride	117	5.227	5.239	-0.012	69	1528972	80.0	81.9	
52 Isobutyl alcohol	41	5.298	5.298	0.000	84	849021	2000.0	1980.1	
53 Benzene	78	5.405	5.417	-0.012	94	3923346	80.0	78.4	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	43	1220640	80.0	75.9	
56 n-Heptane	57	5.630	5.642	-0.012	91	884598	80.0	81.7	
58 Trichloroethene	130	5.986	5.986	0.000	90	1225880	80.0	79.5	
60 Methylcyclohexane	83	6.164	6.176	-0.012	90	2029926	80.0	81.1	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	88	908144	80.0	80.8	
63 Dibromomethane	174	6.294	6.294	0.000	85	784539	80.0	75.4	
64 1,4-Dioxane	88	6.294	6.306	-0.012	33	187742	1600.0	1694.3	
65 Dichlorobromomethane	83	6.424	6.436	-0.012	94	1286301	80.0	81.6	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	91	1392220	160.0	166.6	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	93	1511629	80.0	82.0	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	89	2377711	160.0	159.3	
70 Toluene	91	7.160	7.172	-0.012	94	4260144	80.0	79.6	
71 trans-1,3-Dichloropropene	75	7.349	7.361	-0.012	82	1391341	80.0	80.9	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	88	1361372	80.0	83.5	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	67	859718	80.0	82.0	
75 Tetrachloroethene	166	7.693	7.693	0.000	91	1297004	80.0	82.0	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	87	1458618	80.0	79.9	
77 2-Hexanone	43	7.764	7.765	-0.001	79	1795814	160.0	163.5	
79 Chlorodibromomethane	129	7.919	7.931	-0.012	88	1038431	80.0	82.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.037	8.049	-0.012	97	938884	80.0	78.4	
82 Chlorobenzene	112	8.523	8.524	-0.001	96	2784427	80.0	77.8	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	79	1003714	80.0	81.7	
84 Ethylbenzene	106	8.630	8.630	0.000	97	1565528	80.0	82.2	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	1910562	80.0	81.2	
87 Styrene	104	9.152	9.152	0.000	90	3100442	80.0	82.3	
86 o-Xylene	106	9.140	9.152	-0.012	93	1811249	80.0	79.8	
88 Bromoform	173	9.354	9.354	0.000	99	849153	80.0	84.7	
89 Isopropylbenzene	105	9.520	9.520	0.000	95	4856288	80.0	80.8	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	83	1352703	80.0	79.4	
92 Bromobenzene	156	9.840	9.840	0.000	80	1269533	80.0	78.6	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	68	473318	80.0	78.5	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	52	430124	80.0	82.3	
95 N-Propylbenzene	120	9.946	9.947	-0.001	91	1402046	80.0	82.0	
96 2-Chlorotoluene	126	10.041	10.041	0.000	96	1168008	80.0	79.4	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	3997648	80.0	82.6	
98 4-Chlorotoluene	126	10.148	10.148	0.000	97	1220622	80.0	79.3	
99 tert-Butylbenzene	119	10.468	10.468	0.000	77	3727392	80.0	80.1	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	70	4098181	80.0	81.6	
102 sec-Butylbenzene	105	10.694	10.694	0.000	94	5357379	80.0	83.4	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	96	2421314	80.0	77.4	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	4693383	80.0	85.1	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	95	2449293	80.0	75.5	
108 n-Butylbenzene	91	11.275	11.275	0.000	97	4087812	80.0	85.9	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	98	2259323	80.0	79.0	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	94	436864	80.0	86.1	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	1625332	80.0	82.7	
113 Hexachlorobutadiene	225	13.208	13.196	0.012	86	876579	80.0	85.5	
114 Naphthalene	128	13.279	13.279	0.000	96	4711177	80.0	85.0	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	94	1552764	80.0	87.4	
S 164 Total BTEX	1				0		400.0	401.2	
S 127 Trihalomethanes, Total	1				0		320.0	326.9	
S 124 1,2-Dichloroethene, Total	96				0			151.3	
S 125 1,3-Dichloropropene, Total	75				0			162.9	
S 126 Xylenes, Total	106				0		160.0	161.0	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00255	Amount Added:	64.00	Units: uL
vmarolistdw_00256	Amount Added:	64.00	Units: uL
vmrprimw_00292	Amount Added:	64.00	Units: uL
vm50ss_00329	Amount Added:	64.00	Units: uL

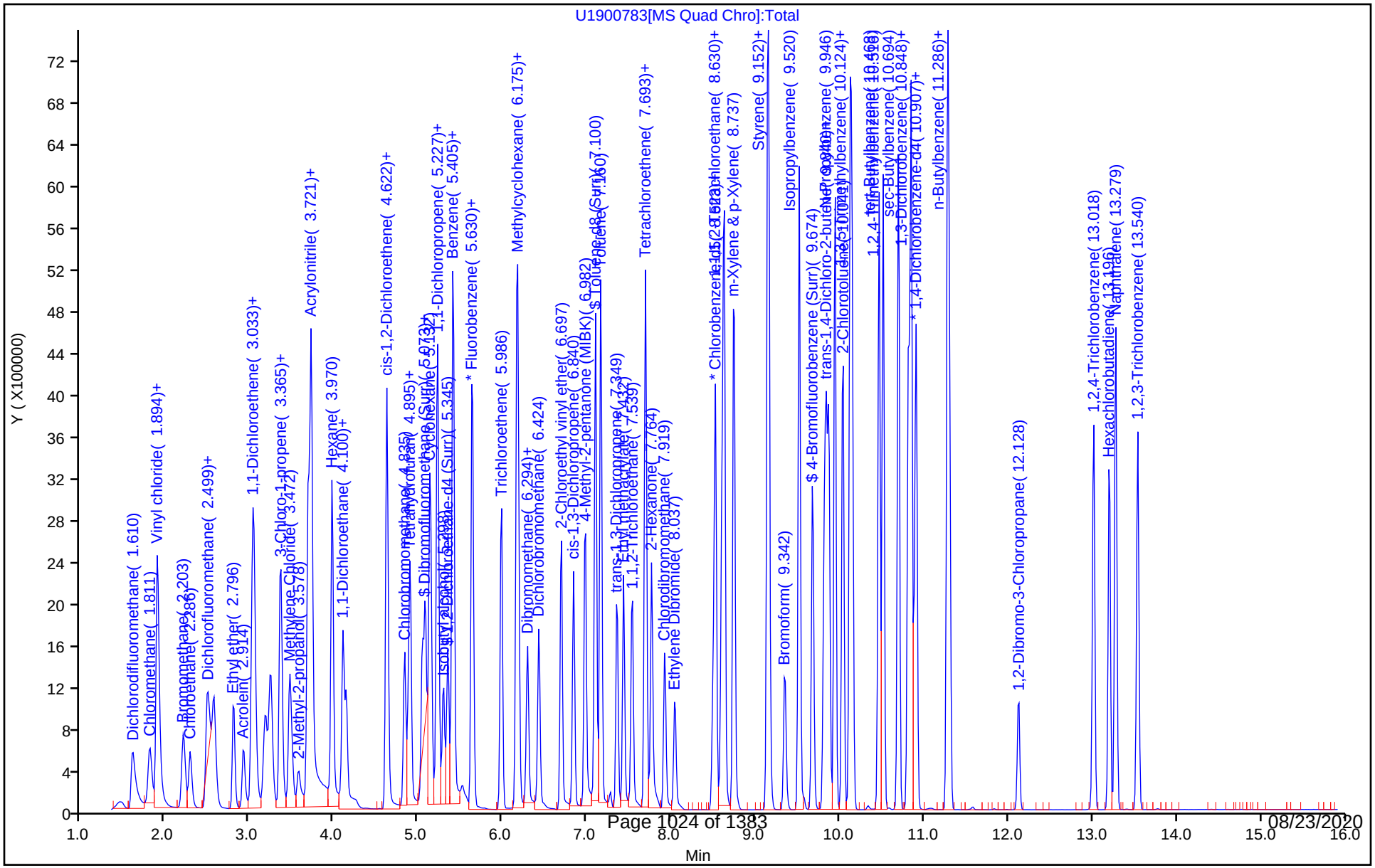
Report Date: 25-Jul-2018 10:13:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900783.d

Injection Date:	24-Jul-2018 17:50:49	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L7			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900784.d
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jul-2018 18:13:04 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:35 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:44:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	92	977352	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	767566	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.884	10.883	0.001	73	440038	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	63	758227	60.0	59.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.357	0.000	98	782592	60.0	58.4	
$ 6 Toluene-d8 (Surr)	98	7.101	7.101	0.000	89	2798059	60.0	60.6	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	92	1010844	60.0	56.9	
9 Dichlorodifluoromethane	85	1.622	1.622	0.000	87	1134505	60.0	66.7	
10 Chloromethane	50	1.824	1.823	0.001	78	955231	60.0	58.0	
12 Butadiene	54	1.907	1.906	0.000	88	989374	60.0	61.8	
11 Vinyl chloride	62	1.930	1.930	0.000	82	993940	60.0	62.4	
13 Bromomethane	94	2.227	2.227	0.000	91	660888	60.0	55.2	
14 Chloroethane	64	2.310	2.310	0.000	87	563348	60.0	58.2	
15 Dichlorofluoromethane	67	2.511	2.511	0.000	83	1312016	60.0	57.4	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	87	1337225	60.0	61.9	
17 Ethyl ether	59	2.808	2.820	-0.012	90	580370	60.0	59.8	
18 Acrolein	56	2.926	2.938	-0.012	96	800130	300.0	313.8	
21 1,1-Dichloroethene	61	3.045	3.033	0.012	89	1128785	60.0	61.0	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	74	793296	60.0	60.1	
22 Acetone	43	3.081	3.080	0.001	88	459712	120.0	142.8	
23 Iodomethane	142	3.199	3.199	0.000	97	1363038	60.0	59.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	98	2317545	60.0	56.0	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	79	1159498	60.0	59.8	
27 Methyl acetate	43	3.389	3.389	0.000	96	1400331	120.0	126.5	
28 Methylene Chloride	49	3.484	3.484	0.000	51	872855	60.0	59.1	
29 2-Methyl-2-propanol	59	3.579	3.579	0.001	88	798354	600.0	662.9	
30 Acrylonitrile	53	3.697	3.697	0.000	99	3368428	600.0	673.8	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	47	2063462	60.0	60.8	
32 trans-1,2-Dichloroethene	61	3.733	3.733	0.000	71	1061569	60.0	58.3	
33 Hexane	57	3.982	3.982	0.000	89	1210166	60.0	60.9	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	84	1313347	60.0	61.1	
35 Vinyl acetate	43	4.148	4.148	0.000	97	1234805	60.0	63.2	
40 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	67	896669	60.0	59.5	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	59	704769	60.0	54.6	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	79	241145	120.0	131.3	
45 Chlorobromomethane	49	4.836	4.836	0.000	75	587580	60.0	59.3	
46 Tetrahydrofuran	42	4.883	4.883	0.000	87	618274	120.0	130.2	
47 Chloroform	83	4.907	4.907	0.000	70	1353439	60.0	60.7	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	81	1224716	60.0	61.0	
49 Cyclohexane	84	5.144	5.144	0.000	85	1279473	60.0	60.9	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	91	1102013	60.0	60.3	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	1167256	60.0	62.4	
52 Isobutyl alcohol	41	5.298	5.298	0.000	83	758926	1500.0	1767.3	
54 1,2-Dichloroethane	62	5.417	5.417	0.000	46	954899	60.0	59.3	
53 Benzene	78	5.417	5.417	0.000	94	3064496	60.0	61.1	
56 n-Heptane	57	5.642	5.642	0.000	89	660181	60.0	60.2	
58 Trichloroethene	130	5.986	5.986	0.000	92	928718	60.0	60.1	
60 Methylcyclohexane	83	6.176	6.176	0.000	89	1566351	60.0	62.5	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	86	704987	60.0	62.6	
63 Dibromomethane	174	6.294	6.294	0.000	88	630606	60.0	60.5	
64 1,4-Dioxane	88	6.306	6.306	0.000	34	142512	1200.0	1284.2	
65 Dichlorobromomethane	83	6.437	6.436	0.000	93	999127	60.0	63.3	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	86	1029389	120.0	123.0	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	95	1135535	60.0	61.5	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	93	1889071	120.0	126.4	
70 Toluene	91	7.172	7.172	0.000	94	3229981	60.0	59.1	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	80	1082760	60.0	61.6	
72 Ethyl methacrylate	69	7.433	7.433	0.000	87	1060082	60.0	63.6	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	73	666583	60.0	62.2	
75 Tetrachloroethene	166	7.694	7.693	0.001	92	994717	60.0	61.5	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	87	1126088	60.0	60.4	
77 2-Hexanone	43	7.765	7.765	0.000	79	1409861	120.0	125.6	
79 Chlorodibromomethane	129	7.919	7.931	-0.012	88	813124	60.0	63.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	99	733594	60.0	59.9	
82 Chlorobenzene	112	8.524	8.524	0.000	96	2173534	60.0	59.5	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	85	798193	60.0	63.6	
84 Ethylbenzene	106	8.630	8.630	0.000	97	1207976	60.0	62.1	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	1482266	60.0	61.7	
86 o-Xylene	106	9.140	9.152	-0.012	93	1435324	60.0	61.9	
87 Styrene	104	9.152	9.152	0.000	90	2428268	60.0	63.1	
88 Bromoform	173	9.354	9.354	0.000	99	655265	60.0	64.0	
89 Isopropylbenzene	105	9.520	9.520	0.000	95	3795594	60.0	61.8	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	83	1065677	60.0	60.8	
92 Bromobenzene	156	9.840	9.840	0.000	80	988831	60.0	59.5	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	67	369092	60.0	59.4	
94 trans-1,4-Dichloro-2-buten	53	9.876	9.875	0.001	52	326498	60.0	60.7	
95 N-Propylbenzene	120	9.947	9.947	0.000	95	1083875	60.0	61.6	
96 2-Chlorotoluene	126	10.042	10.041	0.001	96	918378	60.0	60.6	
97 1,3,5-Trimethylbenzene	105	10.125	10.124	0.001	93	3091430	60.0	62.0	
98 4-Chlorotoluene	126	10.148	10.148	0.000	97	946982	60.0	59.8	
99 tert-Butylbenzene	119	10.468	10.468	0.000	76	2915643	60.0	60.9	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	70	3120829	60.0	60.4	
102 sec-Butylbenzene	105	10.694	10.694	0.000	93	4087764	60.0	61.8	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	90	1874897	60.0	58.2	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	3530033	60.0	62.2	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	94	1892443	60.0	56.6	
108 n-Butylbenzene	91	11.275	11.275	0.000	97	3068191	60.0	62.6	
109 1,2-Dichlorobenzene	146	11.299	11.298	0.001	98	1726550	60.0	58.6	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	94	330105	60.0	63.2	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	1132196	60.0	56.0	
113 Hexachlorobutadiene	225	13.196	13.196	0.000	92	584967	60.0	55.4	
114 Naphthalene	128	13.279	13.279	0.000	96	3349616	60.0	58.7	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	94	1038523	60.0	56.8	
S 127 Trihalomethanes, Total	1				0		240.0	251.5	
S 164 Total BTEX	1				0		300.0	305.8	
S 124 1,2-Dichloroethene, Total	96				0			117.8	
S 125 1,3-Dichloropropene, Total	75				0			123.1	
S 126 Xylenes, Total	106				0		120.0	123.5	

Reagents:

vmarolistdw_00256	Amount Added:	48.00	Units: uL
vmrgas_00255	Amount Added:	48.00	Units: uL
vmrprimw_00292	Amount Added:	48.00	Units: uL
vm50ss_00329	Amount Added:	48.00	Units: uL
vm50is_stk_A_00001	Amount Added:	2.00	Units: uL

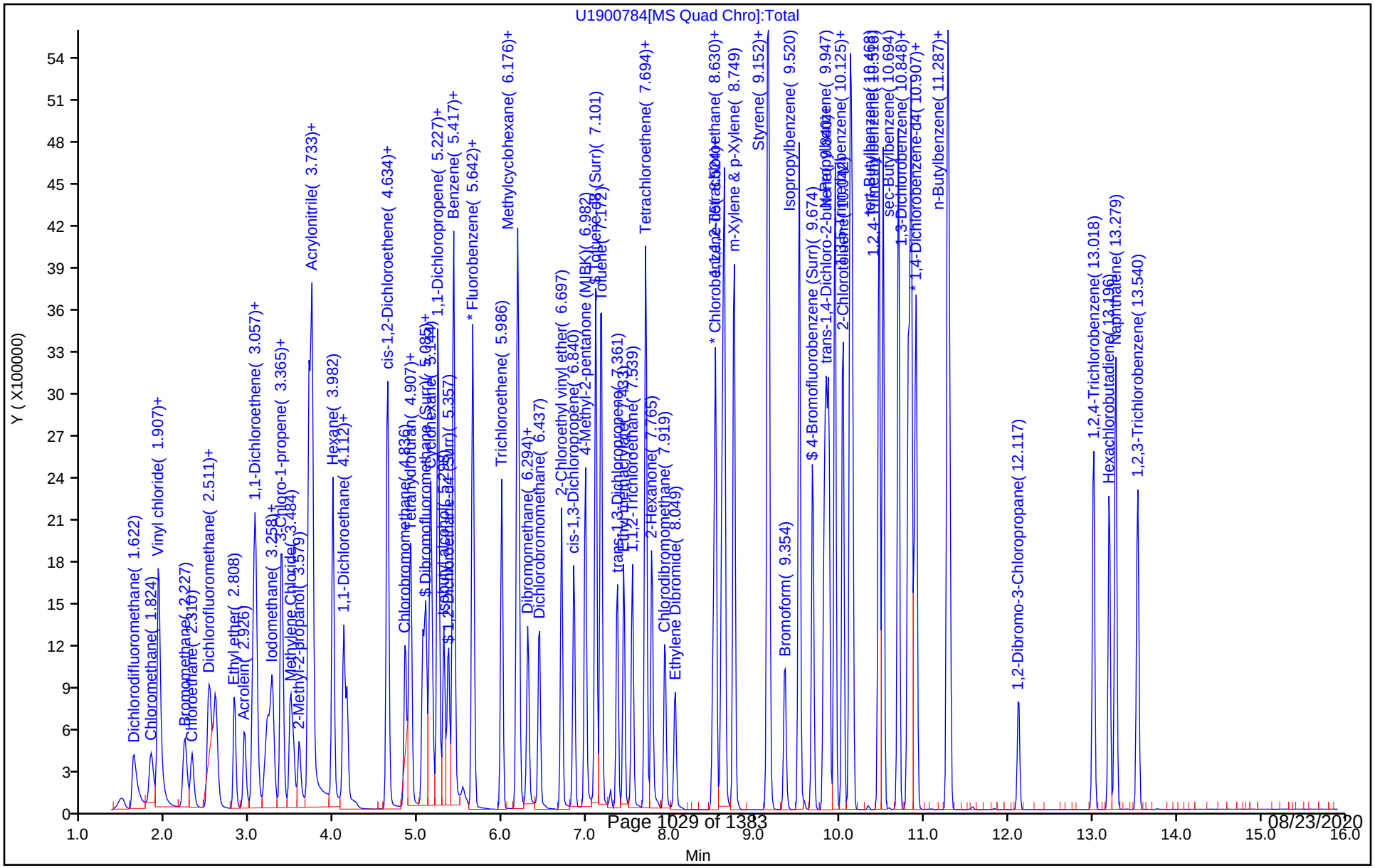
Report Date: 25-Jul-2018 10:13:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900784.d

Injection Date:	24-Jul-2018 18:13:04	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L6			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900790.d
Lims ID: std8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jul-2018 18:35:32 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-009
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:42 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:45:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	95	980424	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	764018	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	76	423933	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	60	483501	40.0	38.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.357	-0.012	99	501017	40.0	37.2	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	-0.001	92	1834190	40.0	39.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	91	659738	40.0	37.3	
9 Dichlorodifluoromethane	85	1.610	1.622	-0.012	88	708511	40.0	41.5	
10 Chloromethane	50	1.811	1.823	-0.012	78	632033	40.0	38.3	
12 Butadiene	54	1.894	1.906	-0.012	87	631099	40.0	39.3	
11 Vinyl chloride	62	1.918	1.930	-0.012	83	644632	40.0	40.3	
13 Bromomethane	94	2.215	2.227	-0.012	90	441425	40.0	36.7	
14 Chloroethane	64	2.298	2.310	-0.012	86	372825	40.0	38.4	
15 Dichlorofluoromethane	67	2.499	2.511	-0.012	83	879608	40.0	38.4	
16 Trichlorofluoromethane	101	2.570	2.582	-0.012	87	861954	40.0	39.8	
17 Ethyl ether	59	2.808	2.820	-0.012	88	370565	40.0	38.0	
18 Acrolein	56	2.926	2.938	-0.012	92	531628	200.0	207.9	
21 1,1-Dichloroethene	61	3.033	3.033	0.000	89	716665	40.0	38.6	
20 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.057	-0.012	76	505930	40.0	38.2	
22 Acetone	43	3.068	3.080	-0.012	63	237768	80.0	73.6	
23 Iodomethane	142	3.187	3.199	-0.012	96	903919	40.0	39.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.246	3.258	-0.012	98	1496184	40.0	36.1	
26 3-Chloro-1-propene	41	3.353	3.365	-0.012	81	747474	40.0	38.4	
27 Methyl acetate	43	3.377	3.389	-0.012	96	828794	80.0	74.6	
28 Methylene Chloride	49	3.472	3.484	-0.012	53	566982	40.0	38.3	
29 2-Methyl-2-propanol	59	3.578	3.579	0.000	9	411966	400.0	341.0	
30 Acrylonitrile	53	3.697	3.697	0.000	99	1977138	400.0	394.3	
32 trans-1,2-Dichloroethene	61	3.721	3.733	-0.012	78	684359	40.0	37.4	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	88	1350698	40.0	39.7	
33 Hexane	57	3.982	3.982	0.000	90	765779	40.0	38.4	
34 1,1-Dichloroethane	63	4.100	4.112	-0.012	85	860929	40.0	40.0	
35 Vinyl acetate	43	4.148	4.148	0.000	96	770166	40.0	39.3	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	74	153177	80.0	83.1	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	64	481767	40.0	37.2	
40 cis-1,2-Dichloroethene	96	4.622	4.634	-0.012	62	582599	40.0	38.6	
45 Chlorobromomethane	49	4.835	4.836	-0.001	89	369472	40.0	37.2	
46 Tetrahydrofuran	42	4.883	4.883	0.000	87	372381	80.0	78.2	
47 Chloroform	83	4.907	4.907	0.000	70	869181	40.0	38.9	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	89	801860	40.0	39.8	
49 Cyclohexane	84	5.144	5.144	0.000	75	815868	40.0	38.7	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	90	708682	40.0	38.7	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	731238	40.0	39.0	
52 Isobutyl alcohol	41	5.298	5.298	0.000	70	449380	1000.0	1043.2	
53 Benzene	78	5.405	5.417	-0.012	93	2003056	40.0	39.8	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	47	617748	40.0	38.2	
56 n-Heptane	57	5.642	5.642	0.000	86	434651	40.0	38.6	
58 Trichloroethene	130	5.986	5.986	0.000	92	608912	40.0	39.3	
60 Methylcyclohexane	83	6.175	6.176	-0.001	90	972024	40.0	38.6	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	86	465852	40.0	41.2	
63 Dibromomethane	174	6.294	6.294	0.000	90	412829	40.0	39.5	
64 1,4-Dioxane	88	6.306	6.306	0.000	32	91591	800.0	822.7	
65 Dichlorobromomethane	83	6.424	6.436	-0.012	94	649042	40.0	41.0	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	86	695808	80.0	82.9	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	93	757793	40.0	40.9	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	92	1213622	80.0	80.9	
70 Toluene	91	7.160	7.172	-0.012	94	2123092	40.0	39.0	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	80	710372	40.0	40.6	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	87	700245	40.0	42.2	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	73	444369	40.0	41.7	
75 Tetrachloroethene	166	7.693	7.693	0.000	91	637692	40.0	39.6	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	87	743433	40.0	40.0	
77 2-Hexanone	43	7.764	7.765	-0.001	79	916606	80.0	82.1	
79 Chlorodibromomethane	129	7.919	7.931	-0.012	88	523153	40.0	41.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	99	483377	40.0	39.7	
82 Chlorobenzene	112	8.523	8.524	-0.001	96	1428038	40.0	39.2	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	85	510579	40.0	40.9	
84 Ethylbenzene	106	8.630	8.630	0.000	98	780525	40.0	40.3	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	952249	40.0	39.8	
87 Styrene	104	9.152	9.152	0.000	89	1558780	40.0	40.7	
86 o-Xylene	106	9.152	9.152	0.000	86	911893	40.0	39.5	
88 Bromoform	173	9.354	9.354	0.000	99	416502	40.0	40.9	
89 Isopropylbenzene	105	9.520	9.520	0.000	95	2424662	40.0	39.7	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	87	686661	40.0	40.6	
92 Bromobenzene	156	9.840	9.840	0.000	87	642419	40.0	40.1	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	68	241838	40.0	40.4	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	59	213375	40.0	41.2	
95 N-Propylbenzene	120	9.946	9.947	-0.001	95	680756	40.0	40.1	
96 2-Chlorotoluene	126	10.041	10.041	0.000	96	581507	40.0	39.9	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	1942019	40.0	40.5	
98 4-Chlorotoluene	126	10.148	10.148	0.000	97	607997	40.0	39.8	
99 tert-Butylbenzene	119	10.468	10.468	0.000	77	1803602	40.0	39.1	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	70	1964040	40.0	39.4	
102 sec-Butylbenzene	105	10.694	10.694	0.000	94	2509293	40.0	39.4	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	89	1193296	40.0	38.4	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	2169356	40.0	39.7	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	94	1214157	40.0	37.7	
108 n-Butylbenzene	91	11.275	11.275	0.000	97	1846843	40.0	39.1	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	98	1090448	40.0	38.4	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	93	200822	40.0	39.9	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	719342	40.0	36.9	
113 Hexachlorobutadiene	225	13.208	13.196	0.012	86	376786	40.0	37.0	
114 Naphthalene	128	13.279	13.279	0.000	96	2169342	40.0	39.5	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	94	684438	40.0	38.8	
S 164 Total BTEX	1				0		200.0	198.4	
S 127 Trihalomethanes, Total	1				0		160.0	161.8	
S 124 1,2-Dichloroethene, Total	96				0			76.0	
S 125 1,3-Dichloropropene, Total	75				0			81.5	
S 126 Xylenes, Total	106				0		80.0	79.3	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00255	Amount Added:	32.00	Units: uL
vmarolistdw_00256	Amount Added:	32.00	Units: uL
vmrprimw_00292	Amount Added:	32.00	Units: uL
vm50ss_00329	Amount Added:	32.00	Units: uL

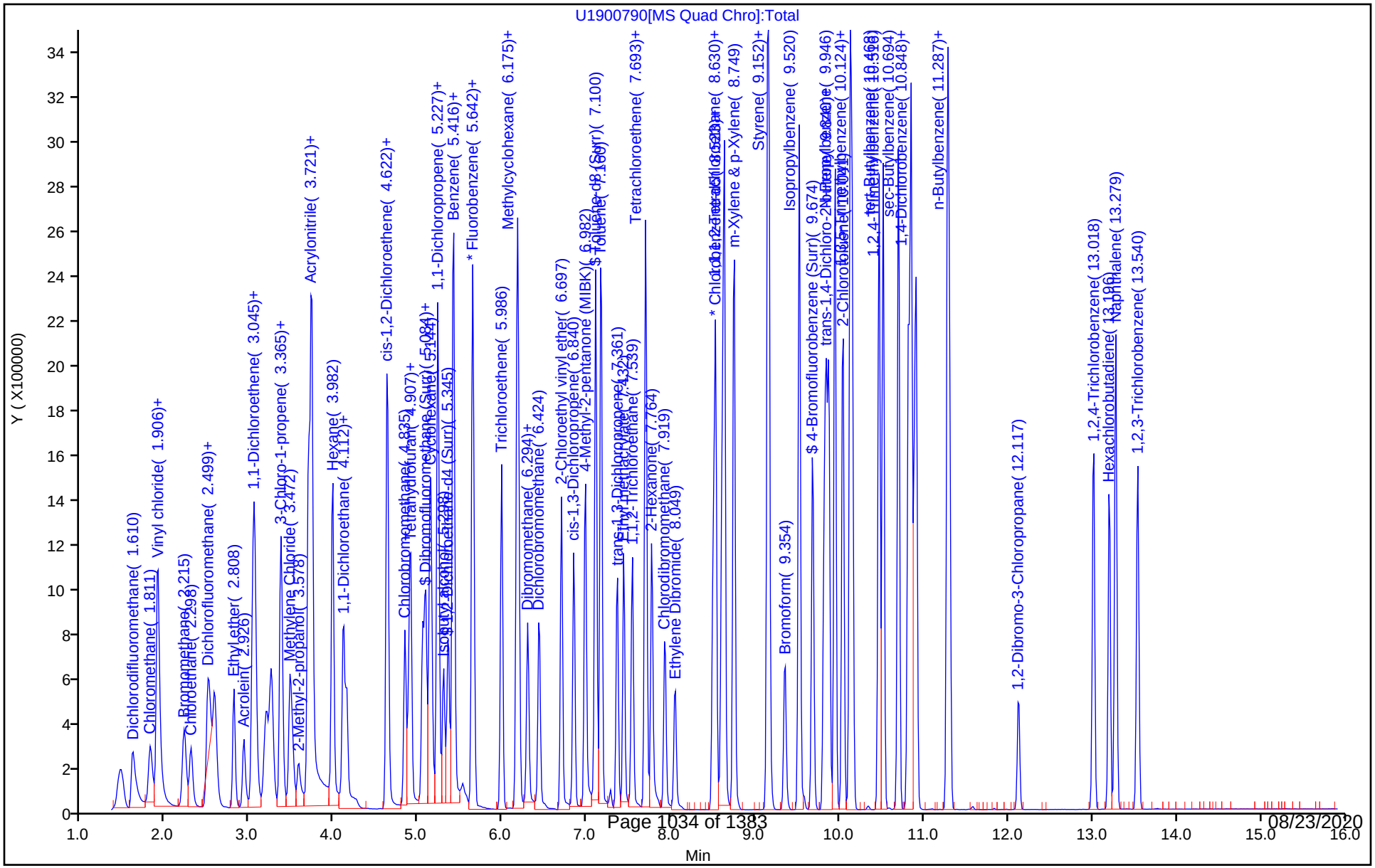
Report Date: 25-Jul-2018 10:13:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900790.d

Injection Date:	24-Jul-2018 18:35:32	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L5			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900791.d
Lims ID: ICIS L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 24-Jul-2018 18:57:47 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-010
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:48 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:47:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	96	929533	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	84	742668	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	89	433286	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	59	235239	20.0	19.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.357	0.000	98	247201	20.0	19.4	
$ 6 Toluene-d8 (Surr)	98	7.101	7.101	0.000	84	849081	20.0	19.0	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	91	320453	20.0	18.7	
9 Dichlorodifluoromethane	85	1.622	1.622	0.000	87	328230	20.0	20.3	
10 Chloromethane	50	1.823	1.823	0.000	89	315290	20.0	20.1	
12 Butadiene	54	1.906	1.906	0.000	86	301883	20.0	19.8	
11 Vinyl chloride	62	1.930	1.930	0.000	74	312915	20.0	20.7	
13 Bromomethane	94	2.227	2.227	0.000	90	229239	20.0	20.1	
14 Chloroethane	64	2.310	2.310	0.000	94	188891	20.0	20.5	
15 Dichlorofluoromethane	67	2.511	2.511	0.000	83	439391	20.0	20.2	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	86	415720	20.0	20.2	
17 Ethyl ether	59	2.820	2.820	0.000	89	180269	20.0	19.5	
18 Acrolein	56	2.938	2.938	0.000	95	227879	100.0	94.0	
21 1,1-Dichloroethene	61	3.033	3.033	0.000	90	347690	20.0	19.7	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	83	247358	20.0	19.7	
22 Acetone	43	3.080	3.080	0.000	74	107763	40.0	35.2	
23 Iodomethane	142	3.199	3.199	0.000	98	440198	20.0	20.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	98	728690	20.0	18.5	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	82	355801	20.0	19.3	
27 Methyl acetate	43	3.389	3.389	0.000	96	391356	40.0	37.2	
28 Methylene Chloride	49	3.484	3.484	0.000	51	279726	20.0	19.9	
29 2-Methyl-2-propanol	59	3.579	3.579	0.000	7	215092	200.0	187.8	
30 Acrylonitrile	53	3.697	3.697	0.000	99	915892	200.0	192.6	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	88	654948	20.0	20.3	
32 trans-1,2-Dichloroethene	61	3.733	3.733	0.000	72	329454	20.0	19.0	
33 Hexane	57	3.982	3.982	0.000	91	356826	20.0	18.9	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	85	413734	20.0	20.3	
35 Vinyl acetate	43	4.148	4.148	0.000	97	357825	20.0	19.3	
40 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	67	281663	20.0	19.7	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	61	247316	20.0	20.1	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	69	66486	40.0	38.1	
45 Chlorobromomethane	49	4.836	4.836	0.000	72	180080	20.0	19.1	
46 Tetrahydrofuran	42	4.883	4.883	0.000	87	169823	40.0	37.6	
47 Chloroform	83	4.907	4.907	0.000	70	422069	20.0	19.9	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	56	378348	20.0	19.8	
49 Cyclohexane	84	5.144	5.144	0.000	85	386296	20.0	19.3	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	92	334178	20.0	19.2	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	345961	20.0	19.5	
52 Isobutyl alcohol	41	5.298	5.298	0.000	69	183028	500.0	448.2	
54 1,2-Dichloroethane	62	5.417	5.417	0.000	45	289097	20.0	18.9	
53 Benzene	78	5.417	5.417	0.000	94	930203	20.0	19.5	
56 n-Heptane	57	5.642	5.642	0.000	84	216048	20.0	18.9	
58 Trichloroethene	130	5.986	5.986	0.000	92	285190	20.0	19.4	
60 Methylcyclohexane	83	6.176	6.176	0.000	89	461990	20.0	19.4	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	84	210992	20.0	19.7	
63 Dibromomethane	174	6.294	6.294	0.000	93	196594	20.0	19.8	
64 1,4-Dioxane	88	6.306	6.306	0.000	33	43840	400.0	415.4	
65 Dichlorobromomethane	83	6.436	6.436	0.000	93	290639	20.0	19.4	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	91	315645	40.0	39.7	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	91	347181	20.0	19.8	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	93	554613	40.0	39.0	
70 Toluene	91	7.172	7.172	0.000	94	985962	20.0	18.6	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	82	315763	20.0	18.6	
72 Ethyl methacrylate	69	7.433	7.433	0.000	87	305349	20.0	18.9	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	74	202390	20.0	19.5	
75 Tetrachloroethene	166	7.693	7.693	0.000	97	300622	20.0	19.2	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	87	344194	20.0	19.1	
77 2-Hexanone	43	7.765	7.765	0.000	79	411400	40.0	37.9	
79 Chlorodibromomethane	129	7.931	7.931	0.000	87	237418	20.0	19.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	99	223763	20.0	18.9	
82 Chlorobenzene	112	8.524	8.524	0.000	96	672294	20.0	19.0	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	86	245845	20.0	20.2	
84 Ethylbenzene	106	8.630	8.630	0.000	97	371072	20.0	19.7	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	455770	20.0	19.6	
86 o-Xylene	106	9.152	9.152	0.000	87	446659	20.0	19.9	
87 Styrene	104	9.152	9.152	0.000	88	733164	20.0	19.7	
88 Bromoform	173	9.354	9.354	0.000	98	190577	20.0	19.2	
89 Isopropylbenzene	105	9.520	9.520	0.000	95	1178300	20.0	19.8	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	87	331847	20.0	19.2	
92 Bromobenzene	156	9.840	9.840	0.000	80	313555	20.0	19.2	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	68	114884	20.0	18.8	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	52	97955	20.0	18.5	
95 N-Propylbenzene	120	9.947	9.947	0.000	91	334963	20.0	19.3	
96 2-Chlorotoluene	126	10.041	10.041	0.000	94	293354	20.0	19.7	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	980405	20.0	20.0	
98 4-Chlorotoluene	126	10.148	10.148	0.000	97	300515	20.0	19.3	
99 tert-Butylbenzene	119	10.468	10.468	0.000	76	908078	20.0	19.3	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	70	1006317	20.0	19.8	
102 sec-Butylbenzene	105	10.694	10.694	0.000	94	1286147	20.0	19.7	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	84	598840	20.0	18.9	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	1117286	20.0	20.0	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	93	606688	20.0	18.4	
108 n-Butylbenzene	91	11.275	11.275	0.000	98	958018	20.0	19.8	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	97	559506	20.0	19.3	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	92	99335	20.0	19.3	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	90	379757	20.0	19.1	
113 Hexachlorobutadiene	225	13.196	13.196	0.000	92	199490	20.0	19.2	
114 Naphthalene	128	13.279	13.279	0.000	96	1094286	20.0	19.5	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	94	351575	20.0	19.5	
S 127 Trihalomethanes, Total	1				0		80.0	77.7	
S 164 Total BTEX	1				0		100.0	97.3	
S 126 Xylenes, Total	106				0		40.0	39.5	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00255	Amount Added:	16.00	Units: uL
vmarolistdw_00256	Amount Added:	16.00	Units: uL
vmrprimw_00292	Amount Added:	16.00	Units: uL
vm50ss_00329	Amount Added:	16.00	Units: uL

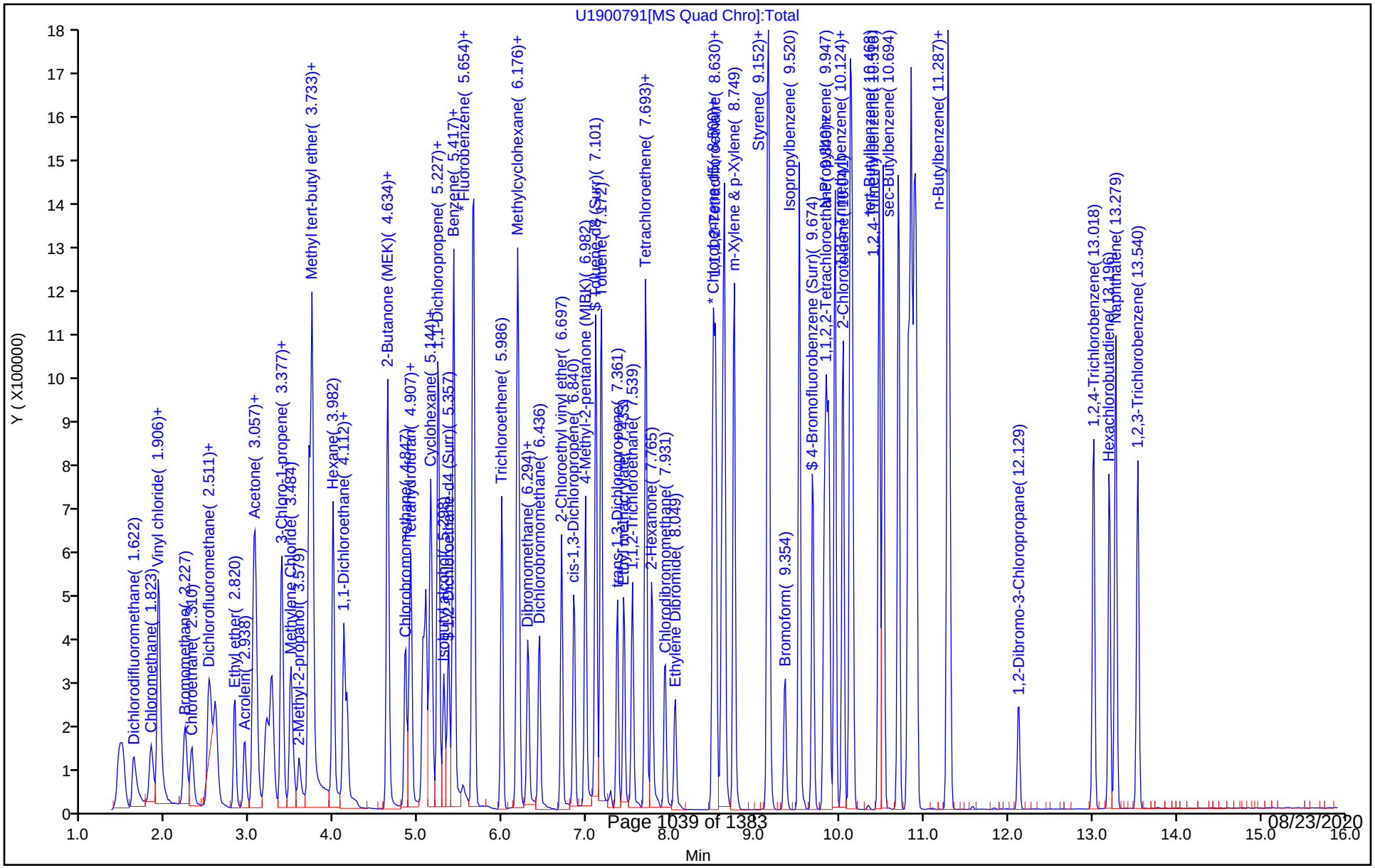
Report Date: 25-Jul-2018 10:13:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900791.d

Injection Date:	24-Jul-2018 18:57:47	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	ICIS L4			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900792.d
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jul-2018 19:20:02 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-011
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:54 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:49:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.653	5.654	-0.001	98	952790	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	771801	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	92	425561	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	60	119809	10.0	9.71	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.357	0.000	90	125069	10.0	9.57	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	-0.001	89	467380	10.0	10.1	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	91	172585	10.0	9.67	
9 Dichlorodifluoromethane	85	1.598	1.622	-0.024	86	151920	10.0	9.16	
10 Chloromethane	50	1.811	1.823	-0.012	78	155433	10.0	9.68	
12 Butadiene	54	1.894	1.906	-0.012	88	137925	10.0	8.83	
11 Vinyl chloride	62	1.918	1.930	-0.012	73	148293	10.0	9.55	
13 Bromomethane	94	2.214	2.227	-0.013	91	114577	10.0	9.81	
14 Chloroethane	64	2.297	2.310	-0.013	94	93395	10.0	9.89	
15 Dichlorofluoromethane	67	2.499	2.511	-0.012	82	215631	10.0	9.68	
16 Trichlorofluoromethane	101	2.570	2.582	-0.012	98	187339	10.0	8.89	
17 Ethyl ether	59	2.807	2.820	-0.013	87	90620	10.0	9.57	
18 Acrolein	56	2.926	2.938	-0.012	95	106196	50.0	42.7	
21 1,1-Dichloroethene	61	3.033	3.033	0.000	90	185910	10.0	10.3	
20 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.057	-0.012	76	134365	10.0	10.4	
22 Acetone	43	3.068	3.080	-0.012	55	52355	20.0	16.7	
23 Iodomethane	142	3.187	3.199	-0.012	97	228493	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.246	3.258	-0.012	98	387941	10.0	9.62	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	82	184068	10.0	9.73	
27 Methyl acetate	43	3.377	3.389	-0.012	84	197122	20.0	18.3	
28 Methylene Chloride	49	3.471	3.484	-0.013	57	144386	10.0	10.0	
29 2-Methyl-2-propanol	59	3.578	3.579	0.000	32	110777	100.0	94.4	
30 Acrylonitrile	53	3.697	3.697	0.000	99	448754	100.0	92.1	
32 trans-1,2-Dichloroethene	61	3.732	3.733	-0.001	71	175373	10.0	9.87	
31 Methyl tert-butyl ether	73	3.732	3.733	-0.001	88	335243	10.0	10.1	
33 Hexane	57	3.981	3.982	-0.001	90	208123	10.0	10.7	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	97	213583	10.0	10.2	
35 Vinyl acetate	43	4.147	4.148	-0.001	96	187841	10.0	9.87	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	71	34072	20.0	19.0	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	65	134434	10.0	10.7	
40 cis-1,2-Dichloroethene	96	4.622	4.634	-0.012	69	143871	10.0	9.80	
45 Chlorobromomethane	49	4.835	4.836	-0.001	84	89489	10.0	9.27	
46 Tetrahydrofuran	42	4.883	4.883	0.000	87	86462	20.0	18.7	
47 Chloroform	83	4.906	4.907	-0.001	70	213657	10.0	9.83	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	90	206006	10.0	10.5	
49 Cyclohexane	84	5.144	5.144	0.000	85	214696	10.0	10.5	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	93	182947	10.0	10.3	
51 Carbon tetrachloride	117	5.238	5.239	-0.001	69	187898	10.0	10.3	
52 Isobutyl alcohol	41	5.298	5.298	0.000	69	105355	250.0	251.7	
53 Benzene	78	5.416	5.417	-0.001	94	494183	10.0	10.1	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	46	152677	10.0	9.72	
56 n-Heptane	57	5.642	5.642	0.000	60	135257	10.0	10.5	
58 Trichloroethene	130	5.985	5.986	-0.001	91	155201	10.0	10.3	
60 Methylcyclohexane	83	6.175	6.176	-0.001	89	256970	10.0	10.5	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	84	110015	10.0	10.0	
63 Dibromomethane	174	6.294	6.294	0.000	91	95707	10.0	9.42	
64 1,4-Dioxane	88	6.306	6.306	0.000	33	23290	200.0	215.3	
65 Dichlorobromomethane	83	6.436	6.436	0.000	93	152581	10.0	9.92	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	86	171233	20.0	21.0	
68 cis-1,3-Dichloropropene	75	6.839	6.840	-0.001	93	175580	10.0	9.76	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	93	308673	20.0	21.2	
70 Toluene	91	7.171	7.172	-0.001	94	544060	10.0	9.89	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	85	172822	10.0	9.78	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	88	166277	10.0	9.93	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	80	109350	10.0	10.1	
75 Tetrachloroethene	166	7.693	7.693	0.000	91	166266	10.0	10.2	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	87	188817	10.0	10.1	
77 2-Hexanone	43	7.764	7.765	-0.001	80	235229	20.0	20.8	
79 Chlorodibromomethane	129	7.930	7.931	-0.001	86	125585	10.0	9.75	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	98	121691	10.0	9.89	
82 Chlorobenzene	112	8.523	8.524	-0.001	97	362449	10.0	9.86	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	80	126948	10.0	10.1	
84 Ethylbenzene	106	8.630	8.630	0.000	98	197845	10.0	10.1	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	245222	10.0	10.1	
87 Styrene	104	9.152	9.152	0.000	88	391122	10.0	10.1	
86 o-Xylene	106	9.152	9.152	0.000	87	240986	10.0	10.3	
88 Bromoform	173	9.353	9.354	-0.001	98	100560	10.0	9.77	
89 Isopropylbenzene	105	9.519	9.520	-0.001	95	636049	10.0	10.3	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	88	173948	10.0	10.3	
92 Bromobenzene	156	9.840	9.840	0.000	87	164497	10.0	10.2	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	69	63108	10.0	10.5	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	64	51819	10.0	9.96	
95 N-Propylbenzene	120	9.946	9.947	-0.001	96	181166	10.0	10.6	
96 2-Chlorotoluene	126	10.041	10.041	0.000	96	151745	10.0	10.4	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	517511	10.0	10.7	
98 4-Chlorotoluene	126	10.148	10.148	0.000	97	160173	10.0	10.5	
99 tert-Butylbenzene	119	10.468	10.468	0.000	77	490442	10.0	10.6	
101 1,2,4-Trimethylbenzene	105	10.515	10.516	-0.001	70	518127	10.0	10.4	
102 sec-Butylbenzene	105	10.693	10.694	-0.001	94	681132	10.0	10.6	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	82	309437	10.0	9.93	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	91	582655	10.0	10.6	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	91	316046	10.0	9.78	
108 n-Butylbenzene	91	11.274	11.275	-0.001	97	498908	10.0	10.5	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	97	286113	10.0	10.0	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	88	48670	10.0	9.63	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	189226	10.0	9.67	
113 Hexachlorobutadiene	225	13.207	13.196	0.011	85	103707	10.0	10.2	
114 Naphthalene	128	13.279	13.279	0.000	96	544587	10.0	9.87	
115 1,2,3-Trichlorobenzene	180	13.539	13.540	-0.001	96	177768	10.0	10.0	
S 164 Total BTEX	1				0		50.0	50.6	
S 127 Trihalomethanes, Total	1				0		40.0	39.3	
S 124 1,2-Dichloroethene, Total	96				0			19.7	
S 125 1,3-Dichloropropene, Total	75				0			19.5	
S 126 Xylenes, Total	106				0		20.0	20.5	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00255	Amount Added:	8.00	Units: uL
vmarolistdw_00256	Amount Added:	8.00	Units: uL
vmrprimw_00292	Amount Added:	8.00	Units: uL
vm50ss_00329	Amount Added:	8.00	Units: uL

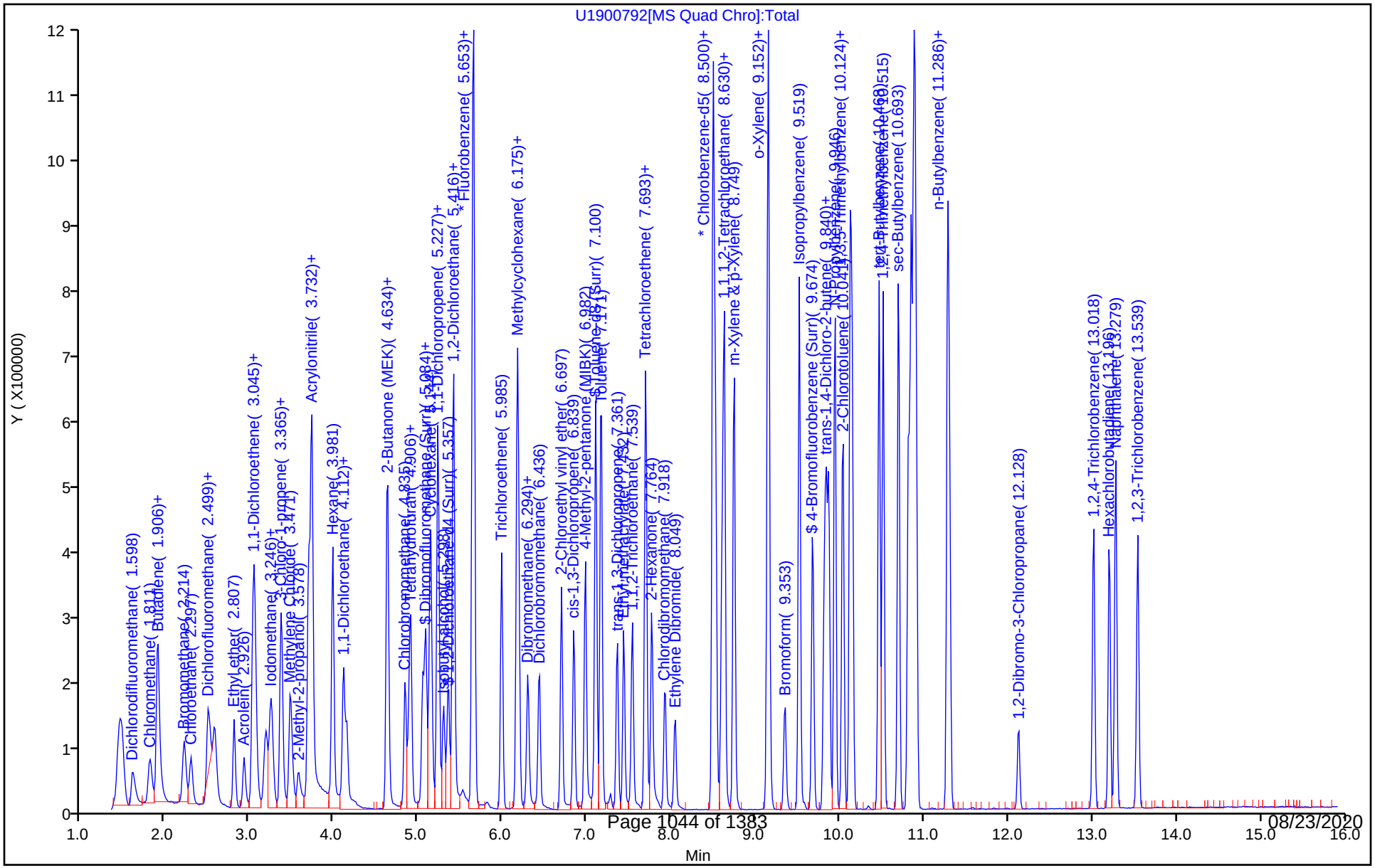
Report Date: 25-Jul-2018 10:13:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900792.d

Injection Date:	24-Jul-2018 19:20:02	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L3			Worklist Smp#:	11
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900793.d
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jul-2018 19:42:05 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-012
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:14:00 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:51:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	894422	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	708670	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.884	10.883	0.001	93	428230	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	60	11849	1.00	1.02	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.357	0.000	88	13421	1.00	1.09	
$ 6 Toluene-d8 (Surr)	98	7.101	7.101	0.000	87	42636	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	86	17427	1.00	1.06	
9 Dichlorodifluoromethane	85	1.610	1.622	-0.012	74	14647	1.00	0.9411	
10 Chloromethane	50	1.812	1.823	-0.011	89	16570	1.00	1.10	
12 Butadiene	54	1.895	1.906	-0.011	88	15313	1.00	1.04	
11 Vinyl chloride	62	1.930	1.930	0.000	70	15847	1.00	1.09	
13 Bromomethane	94	2.215	2.227	-0.012	77	12818	1.00	1.17	
14 Chloroethane	64	2.298	2.310	-0.012	70	9377	1.00	1.06	
15 Dichlorofluoromethane	67	2.499	2.511	-0.012	82	21989	1.00	1.05	
16 Trichlorofluoromethane	101	2.559	2.582	-0.023	73	20928	1.00	1.06	
17 Ethyl ether	59	2.808	2.820	-0.012	80	9442	1.00	1.06	
18 Acrolein	56	2.926	2.938	-0.012	86	11339	5.00	4.86	
21 1,1-Dichloroethene	61	3.033	3.033	0.000	92	17119	1.00	1.01	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	63	12789	1.00	1.06	
22 Acetone	43	3.069	3.080	-0.011	66	7064	2.00	2.40	
23 Iodomethane	142	3.187	3.199	-0.012	96	21574	1.00	1.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.247	3.258	-0.011	96	43688	1.00	1.15	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	84	18985	1.00	1.07	
27 Methyl acetate	43	3.389	3.389	0.000	92	19667	2.00	1.94	
28 Methylene Chloride	49	3.472	3.484	-0.012	75	15117	1.00	1.12	
29 2-Methyl-2-propanol	59	3.579	3.579	0.001	70	12788	10.0	11.6	
30 Acrylonitrile	53	3.697	3.697	0.000	100	41875	10.0	9.15	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	87	32315	1.00	1.04	
32 trans-1,2-Dichloroethene	61	3.733	3.733	0.000	73	17800	1.00	1.07	
33 Hexane	57	3.982	3.982	0.000	92	18280	1.00	1.00	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	83	19272	1.00	0.9804	
35 Vinyl acetate	43	4.148	4.148	0.000	95	16923	1.00	0.9468	
40 cis-1,2-Dichloroethene	96	4.622	4.634	-0.012	78	14795	1.00	1.07	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	56	12773	1.00	1.08	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	60	3193	2.00	1.90	
45 Chlorobromomethane	49	4.836	4.836	0.000	67	9868	1.00	1.09	
46 Tetrahydrofuran	42	4.883	4.883	0.000	84	9301	2.00	2.14	
47 Chloroform	83	4.907	4.907	0.000	66	21458	1.00	1.05	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	80	17835	1.00	0.9707	
49 Cyclohexane	84	5.144	5.144	0.000	82	19597	1.00	1.02	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	87	17455	1.00	1.04	
51 Carbon tetrachloride	117	5.239	5.239	0.000	75	17198	1.00	1.01	
52 Isobutyl alcohol	41	5.298	5.298	0.000	89	7910	25.0	20.1	
54 1,2-Dichloroethane	62	5.417	5.417	0.000	50	15873	1.00	1.08	
53 Benzene	78	5.417	5.417	0.000	94	48419	1.00	1.06	
56 n-Heptane	57	5.654	5.642	0.012	38	35642	1.00	1.01	
58 Trichloroethene	130	5.986	5.986	0.000	84	14571	1.00	1.03	
60 Methylcyclohexane	83	6.176	6.176	0.000	88	22689	1.00	0.9886	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	79	10704	1.00	1.04	
63 Dibromomethane	174	6.294	6.294	0.000	82	9635	1.00	1.01	
64 1,4-Dioxane	88	6.318	6.306	0.012	1	1478	20.0	14.6	
65 Dichlorobromomethane	83	6.425	6.436	-0.011	87	13539	1.00	0.9376	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	82	14128	2.00	1.84	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	76	17042	1.00	1.01	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	91	26811	2.00	1.96	
70 Toluene	91	7.172	7.172	0.000	93	51989	1.00	1.03	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	75	16254	1.00	1.00	
72 Ethyl methacrylate	69	7.433	7.433	0.000	77	14391	1.00	0.9357	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	74	9825	1.00	0.99	
75 Tetrachloroethene	166	7.694	7.693	0.001	89	14983	1.00	1.00	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	77	17817	1.00	1.03	
77 2-Hexanone	43	7.777	7.765	0.012	67	19416	2.00	1.87	
79 Chlorodibromomethane	129	7.931	7.931	0.000	74	11860	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	85	11944	1.00	1.06	
82 Chlorobenzene	112	8.524	8.524	0.000	65	36126	1.00	1.07	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	59	11650	1.00	1.01	
84 Ethylbenzene	106	8.630	8.630	0.000	96	18517	1.00	1.03	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	21784	1.00	0.9817	
86 o-Xylene	106	9.140	9.152	-0.012	91	20892	1.00	0.9751	
87 Styrene	104	9.152	9.152	0.000	88	33956	1.00	0.9551	
88 Bromoform	173	9.354	9.354	0.000	82	8645	1.00	0.9144	
89 Isopropylbenzene	105	9.520	9.520	0.000	91	55210	1.00	0.9739	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	77	17817	1.00	1.04	
92 Bromobenzene	156	9.840	9.840	0.000	89	15559	1.00	0.9619	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	70	5494	1.00	0.9090	
94 trans-1,4-Dichloro-2-buten	53	9.864	9.875	-0.011	44	4738	1.00	0.9051	
95 N-Propylbenzene	120	9.947	9.947	0.000	94	16107	1.00	0.9402	
96 2-Chlorotoluene	126	10.042	10.041	0.001	93	15255	1.00	1.04	
97 1,3,5-Trimethylbenzene	105	10.125	10.124	0.001	93	45567	1.00	0.9397	
98 4-Chlorotoluene	126	10.148	10.148	0.000	94	15545	1.00	1.01	
99 tert-Butylbenzene	119	10.468	10.468	0.000	88	47758	1.00	1.02	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	68	49545	1.00	0.9846	
102 sec-Butylbenzene	105	10.694	10.694	0.000	90	61320	1.00	0.9521	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	11	33191	1.00	1.06	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	82	50862	1.00	0.9208	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	52	35488	1.00	1.09	
108 n-Butylbenzene	91	11.275	11.275	0.000	94	45503	1.00	0.9538	
109 1,2-Dichlorobenzene	146	11.299	11.298	0.001	94	30581	1.00	1.07	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	47	4764	1.00	0.9369	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	82	21592	1.00	1.10	
113 Hexachlorobutadiene	225	13.208	13.196	0.012	66	10992	1.00	1.07	
114 Naphthalene	128	13.279	13.279	0.000	93	57589	1.00	1.04	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	86	18094	1.00	1.02	
S 127 Trihalomethanes, Total	1				0		4.00	3.91	
S 164 Total BTEX	1				0		5.00	5.07	
S 124 1,2-Dichloroethene, Total	96				0			2.14	
S 125 1,3-Dichloropropene, Total	75				0			2.01	
S 126 Xylenes, Total	106				0		2.00	1.96	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00255	Amount Added:	0.80	Units: uL
vmarolistdw_00256	Amount Added:	0.80	Units: uL
vmrprimw_00292	Amount Added:	0.80	Units: uL
vm50ss_00329	Amount Added:	0.80	Units: uL

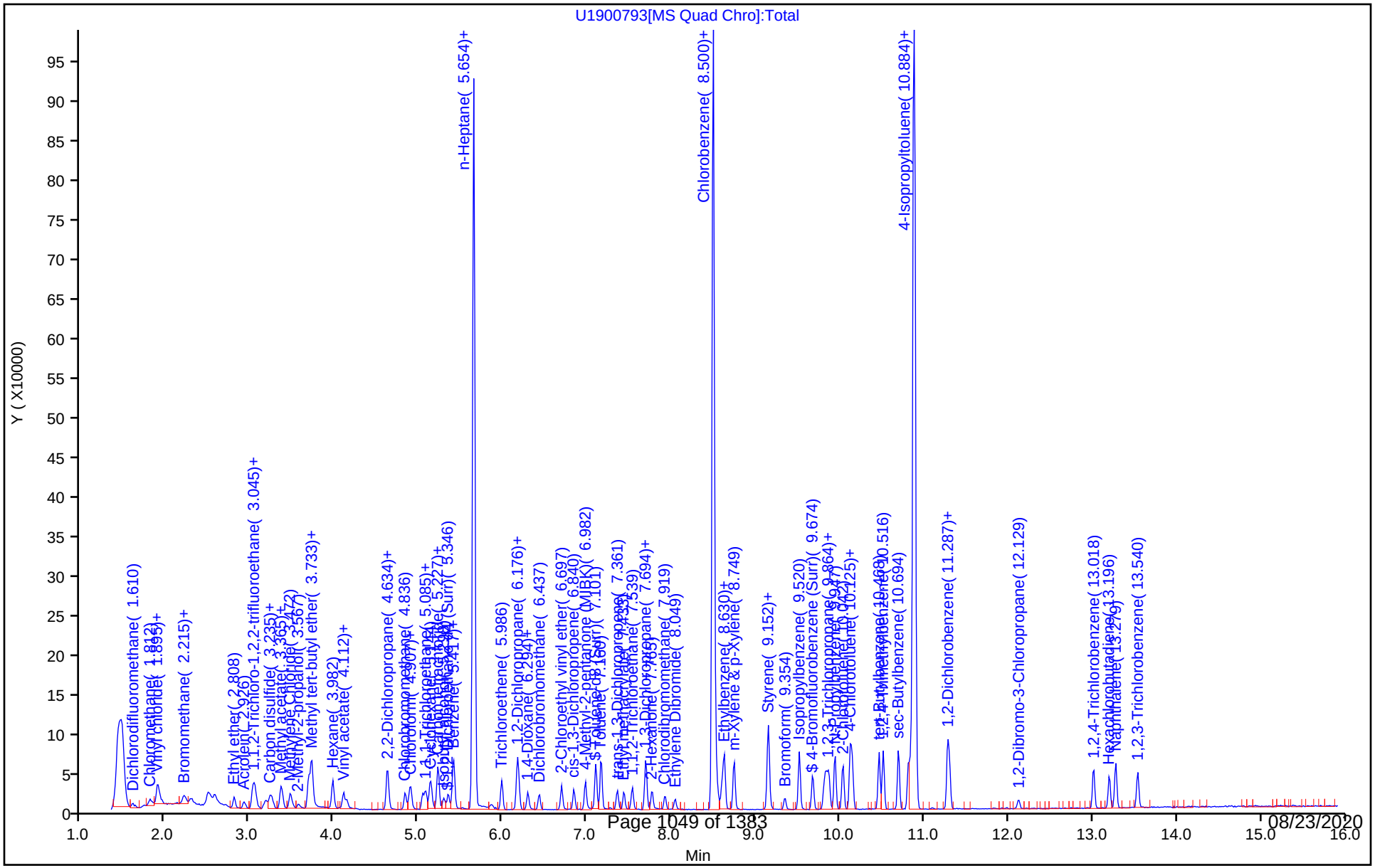
Report Date: 25-Jul-2018 10:14:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900793.d

Injection Date:	24-Jul-2018 19:42:05	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L2			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jul-2018 20:04:28 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-013
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:14:09 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:56:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	923893	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	84	731189	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	93	428789	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	56	6754	0.5000	0.5647	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.357	0.000	75	7422	0.5000	0.5855	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	-0.001	74	22890	0.5000	0.5200	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	79	10413	0.5000	0.6156	
9 Dichlorodifluoromethane	85	1.633	1.622	0.011	62	6894	0.5000	0.4288	
10 Chloromethane	50	1.823	1.823	0.000	71	8217	0.5000	0.5278	
12 Butadiene	54	1.906	1.906	0.000	82	7871	0.5000	0.5198	
11 Vinyl chloride	62	1.930	1.930	0.000	64	6342	0.5000	0.4211	
13 Bromomethane	94	2.238	2.227	0.011	71	6350	0.5000	0.5606	
14 Chloroethane	64	2.309	2.310	-0.001	60	4872	0.5000	0.5321	
15 Dichlorofluoromethane	67	2.511	2.511	0.000	53	12059	0.5000	0.5584	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	75	10381	0.5000	0.5081	
17 Ethyl ether	59	2.819	2.820	-0.001	67	5066	0.5000	0.5520	
18 Acrolein	56	2.938	2.938	0.000	82	6772	2.50	2.81	
21 1,1-Dichloroethene	61	3.045	3.033	0.012	68	8796	0.5000	0.5026	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	-0.001	56	6009	0.5000	0.4815	
22 Acetone	43		3.080				ND	ND	U
23 Iodomethane	142	3.187	3.199	-0.012	82	10728	0.5000	0.4956	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.246	3.258	-0.012	95	23708	0.5000	0.6063	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	77	9784	0.5000	0.5336	
27 Methyl acetate	43	3.389	3.389	0.000	86	13362	1.00	1.28	
28 Methylene Chloride	49		3.484				ND	ND	U
29 2-Methyl-2-propanol	59		3.579				ND	ND	U
30 Acrylonitrile	53	3.697	3.697	0.000	99	26540	5.00	5.62	
32 trans-1,2-Dichloroethene	61	3.732	3.733	-0.001	74	9868	0.5000	0.5730	
31 Methyl tert-butyl ether	73	3.732	3.733	-0.001	83	15911	0.5000	0.4958	
33 Hexane	57	3.981	3.982	-0.001	90	9277	0.5000	0.4936	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	54	9924	0.5000	0.4888	
35 Vinyl acetate	43	4.148	4.148	0.000	95	9654	0.5000	0.5229	
41 2-Butanone (MEK)	72		4.634				ND	ND	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	46	6159	0.5000	0.5045	
40 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	56	7528	0.5000	0.5287	
45 Chlorobromomethane	49	4.835	4.836	-0.001	65	5651	0.5000	0.6036	
46 Tetrahydrofuran	42	4.895	4.883	0.012	78	4596	1.00	1.02	
47 Chloroform	83	4.906	4.907	-0.001	60	10692	0.5000	0.5074	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	72	9137	0.5000	0.4814	
49 Cyclohexane	84	5.144	5.144	0.000	79	9806	0.5000	0.4936	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	85	8674	0.5000	0.5025	
51 Carbon tetrachloride	117	5.239	5.239	-0.001	69	8406	0.5000	0.4757	
52 Isobutyl alcohol	41	5.298	5.298	0.000	73	5482	12.5	13.5	
53 Benzene	78	5.416	5.417	-0.001	94	22844	0.5000	0.4820	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	40	8485	0.5000	0.5573	
56 n-Heptane	57		5.642				ND	ND	U
58 Trichloroethene	130	5.986	5.986	0.000	83	7211	0.5000	0.4940	
60 Methylcyclohexane	83	6.175	6.176	-0.001	83	11515	0.5000	0.4857	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	62	4734	0.5000	0.4448	
63 Dibromomethane	174	6.306	6.294	0.012	67	5496	0.5000	0.5580	
64 1,4-Dioxane	88		6.306				ND	ND	U
65 Dichlorobromomethane	83	6.436	6.436	0.000	71	7466	0.5000	0.5005	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	76	7395	1.00	0.9347	
68 cis-1,3-Dichloropropene	75	6.839	6.840	-0.001	66	8313	0.5000	0.4764	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	86	13091	1.00	0.9263	
70 Toluene	91	7.171	7.172	-0.001	90	28549	0.5000	0.5479	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	72	8702	0.5000	0.5197	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	67	7650	0.5000	0.4821	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	65	4656	0.5000	0.4562	
75 Tetrachloroethene	166	7.693	7.693	0.000	89	7470	0.5000	0.4851	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	73	8871	0.5000	0.4993	
77 2-Hexanone	43	7.764	7.765	-0.001	87	10457	1.00	0.9783	
79 Chlorodibromomethane	129	7.919	7.931	-0.012	51	5763	0.5000	0.4723	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	69	6061	0.5000	0.5198	
82 Chlorobenzene	112	8.523	8.524	-0.001	47	18258	0.5000	0.5243	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	47	5213	0.5000	0.4361	
84 Ethylbenzene	106	8.630	8.630	0.000	92	8398	0.5000	0.4528	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	96	11276	0.5000	0.4925	
87 Styrene	104	9.152	9.152	0.000	84	17512	0.5000	0.4774	
86 o-Xylene	106	9.152	9.152	0.000	82	10860	0.5000	0.4913	
88 Bromoform	173		9.354				ND	ND	U
89 Isopropylbenzene	105	9.519	9.520	-0.001	87	28418	0.5000	0.4859	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	49	8105	0.5000	0.4742	
92 Bromobenzene	156	9.840	9.840	0.000	80	8740	0.5000	0.5396	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	57	3387	0.5000	0.5596	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	36	2893	0.5000	0.5519	
95 N-Propylbenzene	120	9.946	9.947	-0.001	90	8359	0.5000	0.4873	
96 2-Chlorotoluene	126	10.041	10.041	0.000	86	6977	0.5000	0.4728	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	88	22067	0.5000	0.4545	
98 4-Chlorotoluene	126	10.148	10.148	0.000	89	7717	0.5000	0.4998	
99 tert-Butylbenzene	119	10.468	10.468	0.000	82	22397	0.5000	0.4799	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	62	24672	0.5000	0.4897	
102 sec-Butylbenzene	105	10.693	10.694	-0.001	78	30350	0.5000	0.4706	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	1	17372	0.5000	0.5533	a
104 4-Isopropyltoluene	119	10.848	10.848	0.000	80	25586	0.5000	0.4626	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	42	19169	0.5000	0.5888	
108 n-Butylbenzene	91	11.275	11.275	0.000	91	21675	0.5000	0.4537	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	87	14939	0.5000	0.5204	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	24	2566	0.5000	0.5040	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	65	10787	0.5000	0.5471	
113 Hexachlorobutadiene	225	13.196	13.196	0.000	52	5347	0.5000	0.5195	
114 Naphthalene	128	13.279	13.279	0.000	81	27099	0.5000	0.4874	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	60	8865	0.5000	0.4972	
S 164 Total BTEX	1				0		2.50	2.47	
S 127 Trihalomethanes, Total	1				0		2.00	1.48	
S 124 1,2-Dichloroethene, Total	96				0			1.10	
S 125 1,3-Dichloropropene, Total	75				0			1.00	
S 126 Xylenes, Total	106				0		1.00	0.9838	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00255	Amount Added:	0.40	Units: uL
vmarolistdw_00256	Amount Added:	0.40	Units: uL
vmrprimw_00292	Amount Added:	0.40	Units: uL
vm50ss_00329	Amount Added:	0.40	Units: uL

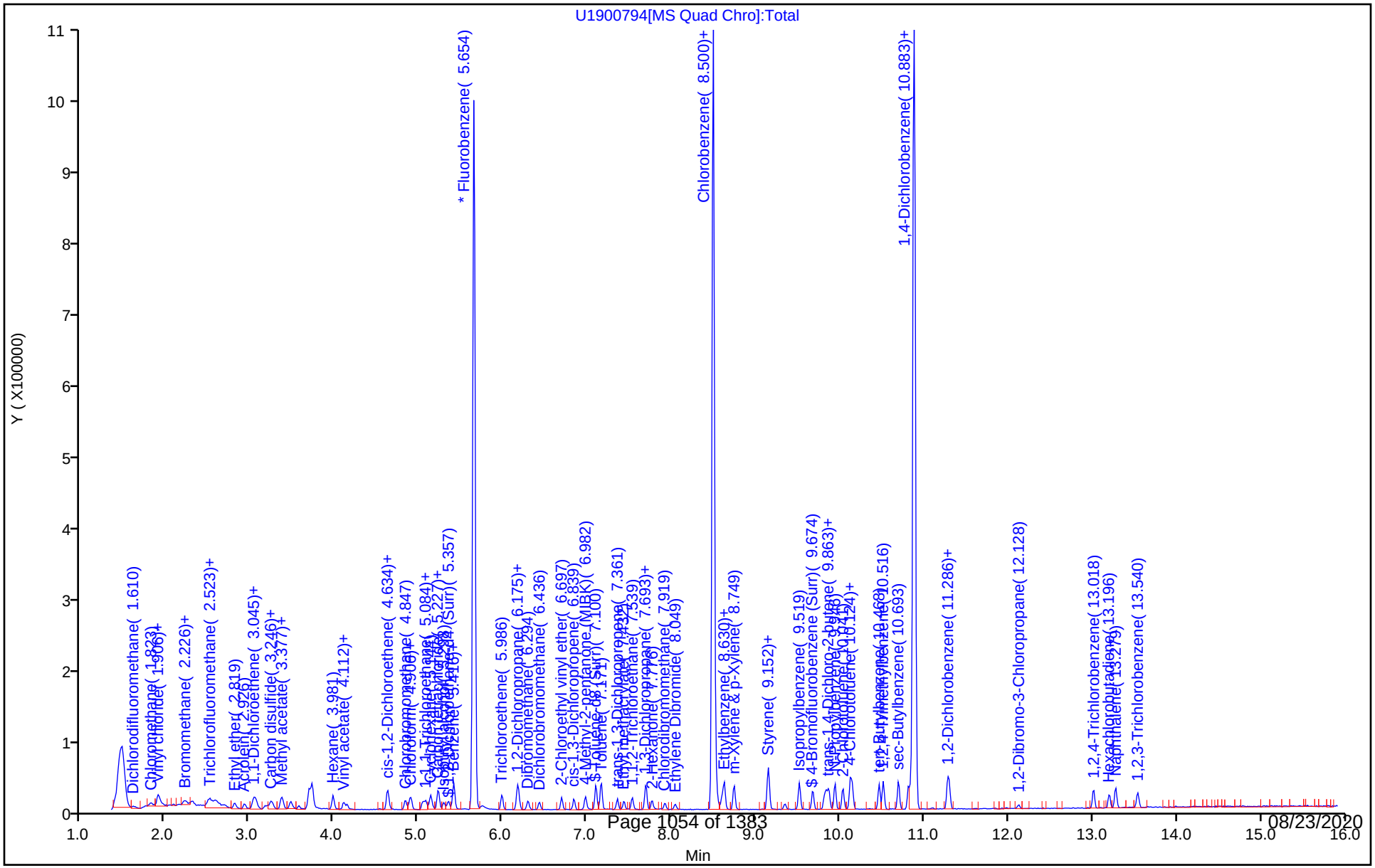
Report Date: 25-Jul-2018 10:14:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Injection Date:	24-Jul-2018 20:04:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L1			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

TestAmerica Canton

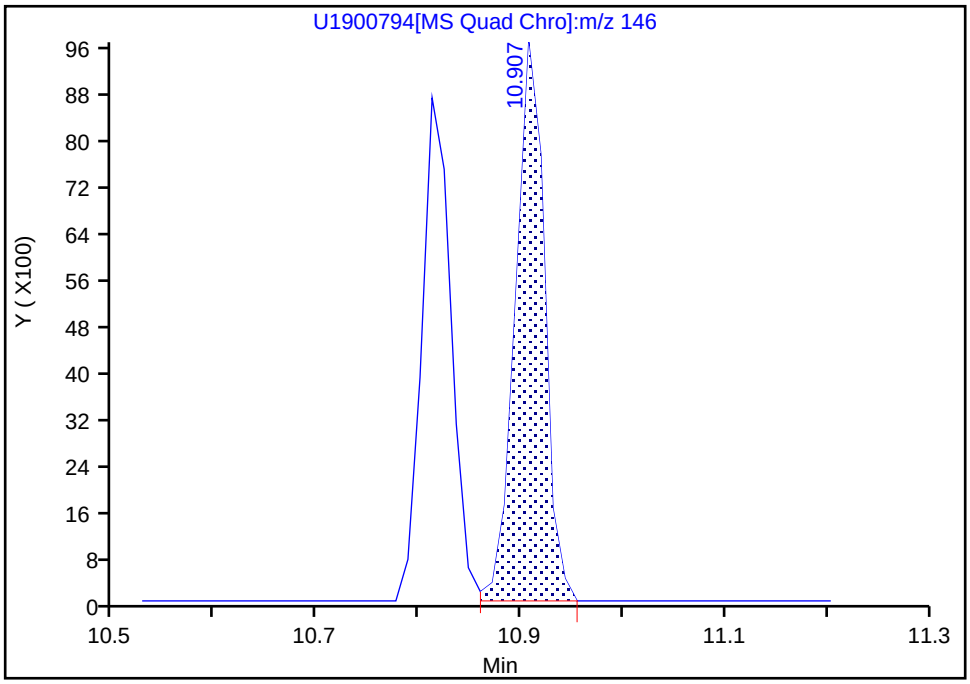
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d				
Injection Date:	24-Jul-2018 20:04:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

103 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

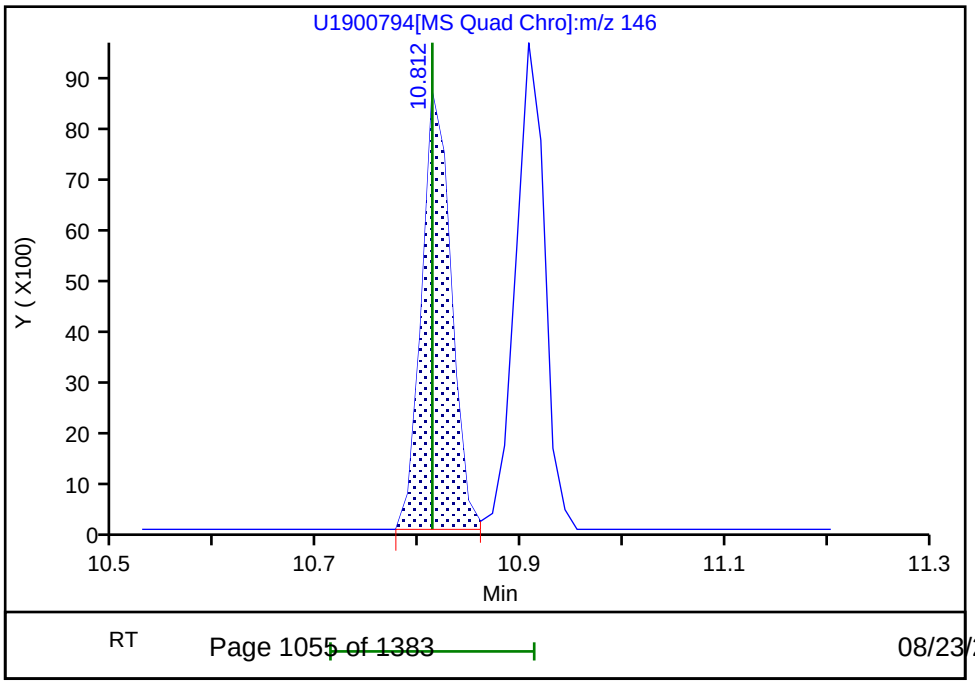
Processing Integration Results

RT: 10.91
Area: 19169
Amount: 0.600710
Amount Units: ug/l



Manual Integration Results

RT: 10.81
Area: 17372
Amount: 0.553299
Amount Units: ug/l



Reviewer: laveyt, 25-Jul-2018 09:51:37

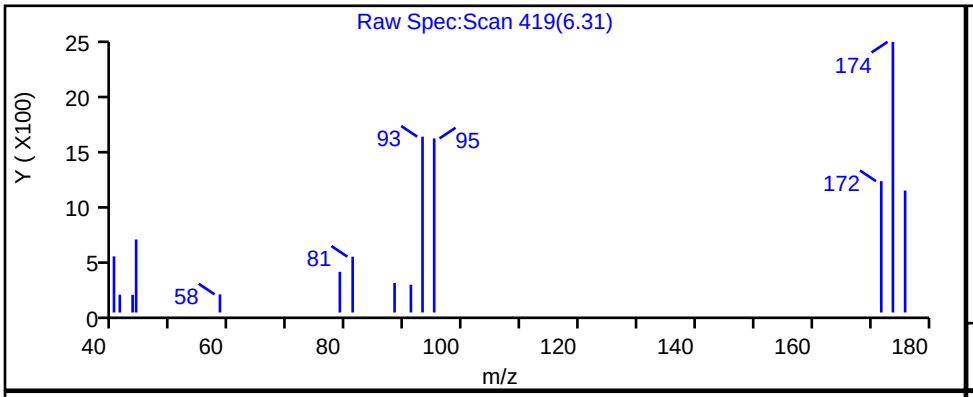
User Disabled Compound Report

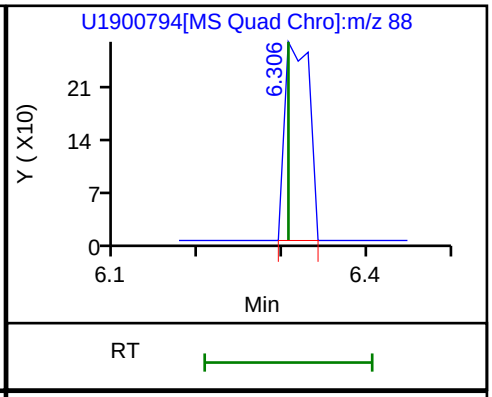
TestAmerica Canton

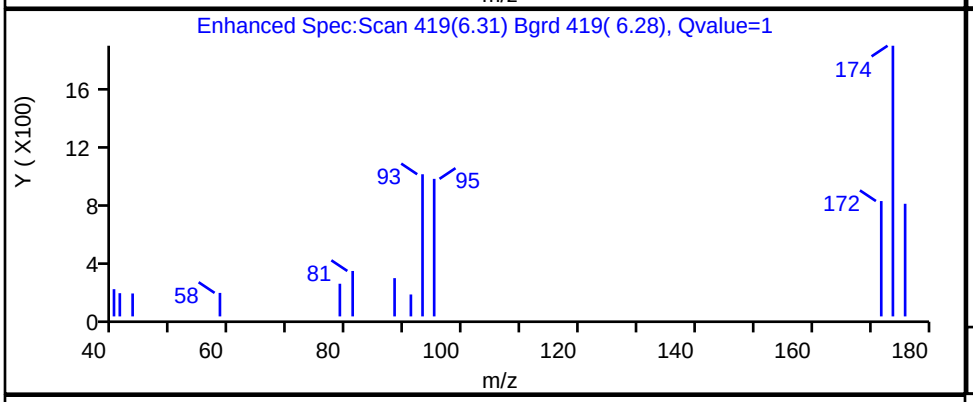
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d				
Injection Date:	24-Jul-2018 20:04:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

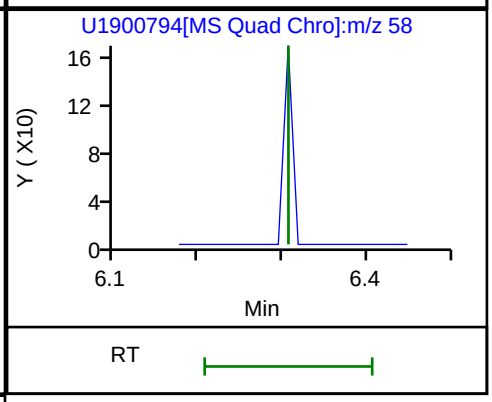
64 1,4-Dioxane, CAS: 123-91-1

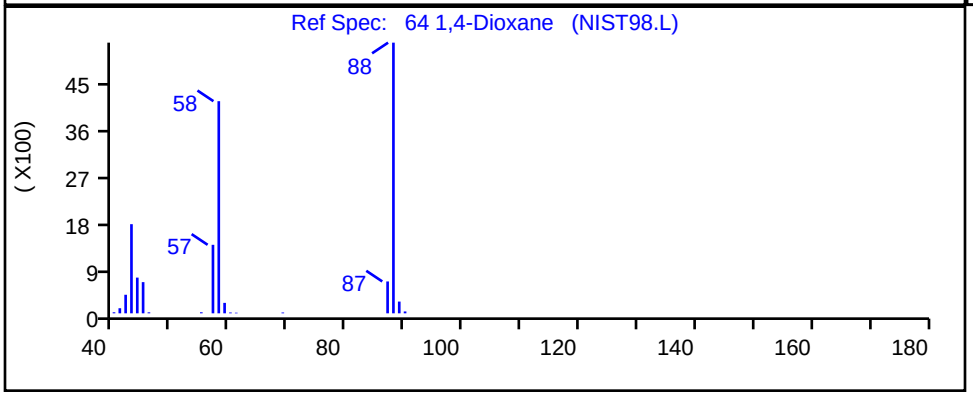
Processing Results











RT	Mass	Response	Amount
6.31	88.00	541	10.248924
6.31	58.00	0	

Reviewer: laveyt, 25-Jul-2018 10:11:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

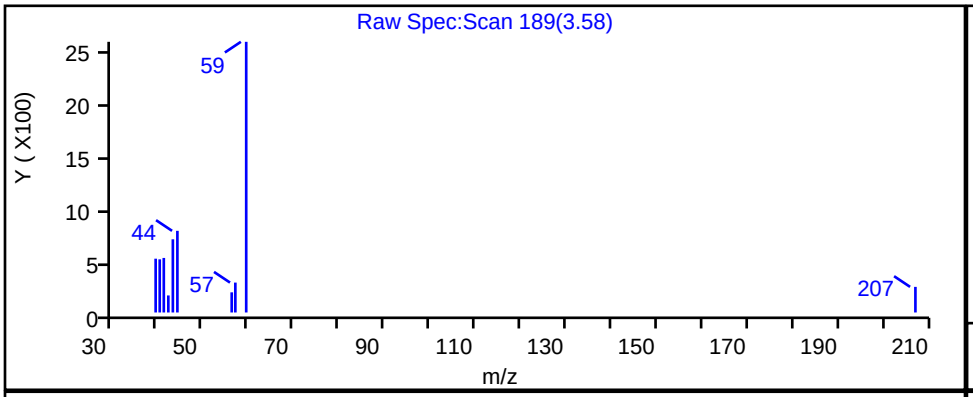
User Disabled Compound Report

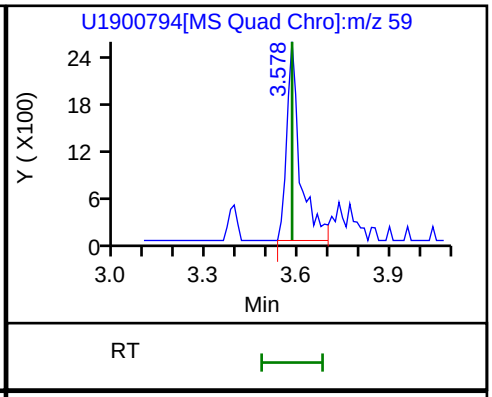
TestAmerica Canton

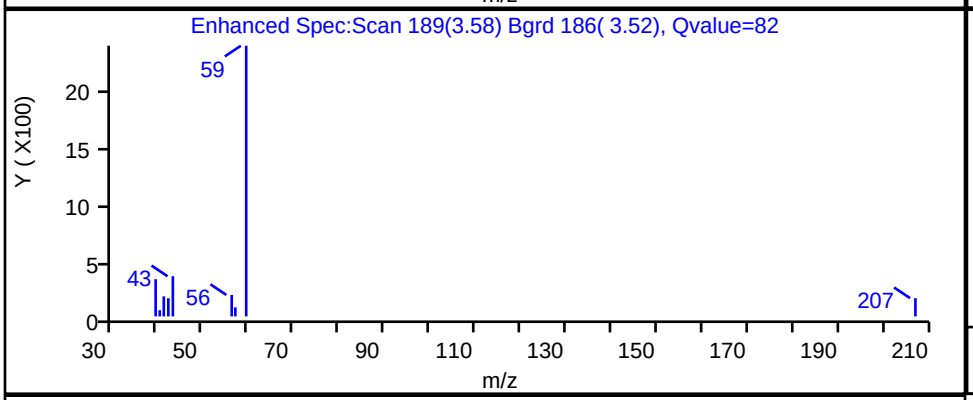
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d				
Injection Date:	24-Jul-2018 20:04:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

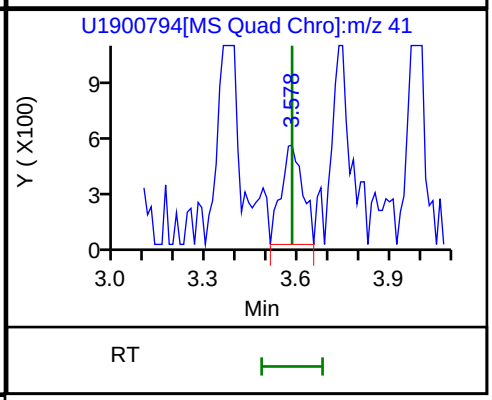
29 2-Methyl-2-propanol, CAS: 75-65-0

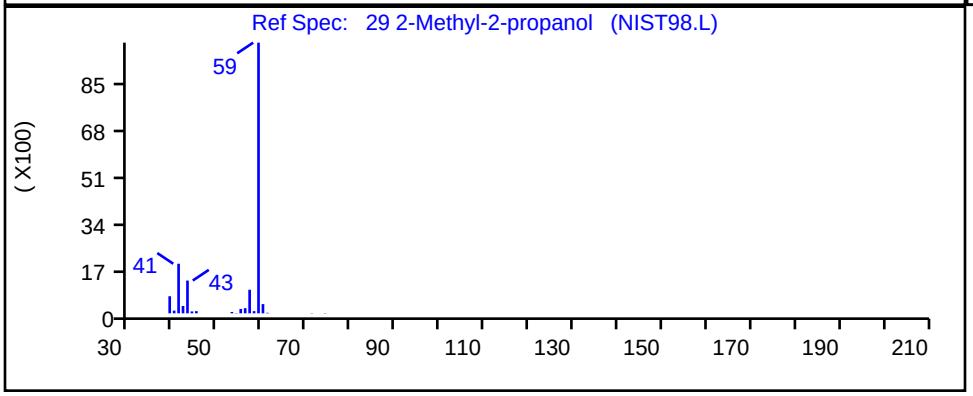
Processing Results











RT	Mass	Response	Amount
3.58	59.00	7655	6.614472
3.58	41.00	2500	

Reviewer: laveyt, 25-Jul-2018 09:53:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Injection Date: 24-Jul-2018 20:04:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

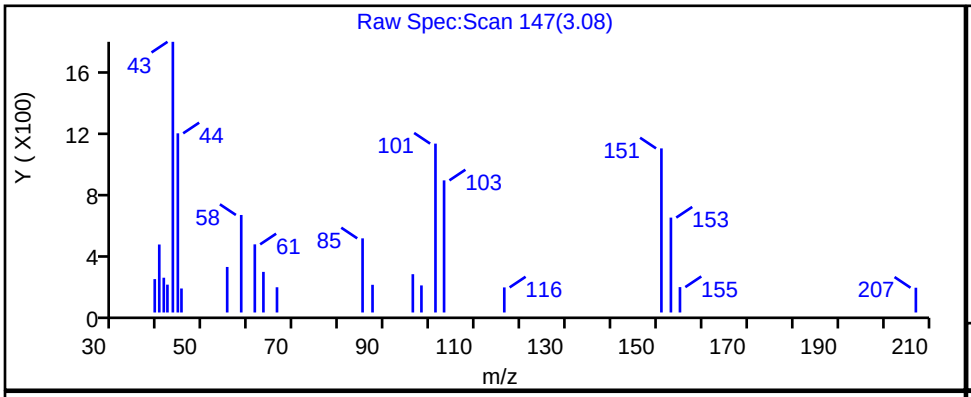
Injection Vol: 5.0 mL Dil. Factor: 1.0000

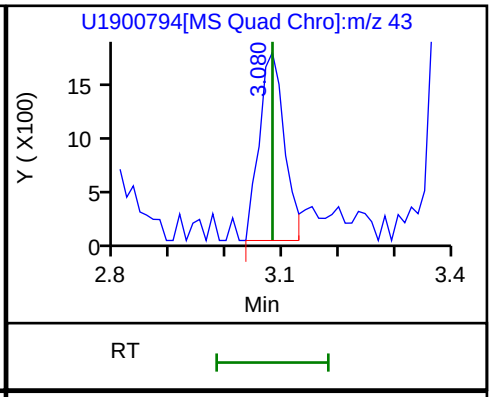
Method: 8260_19 Limit Group: MSV 8260C ICAL

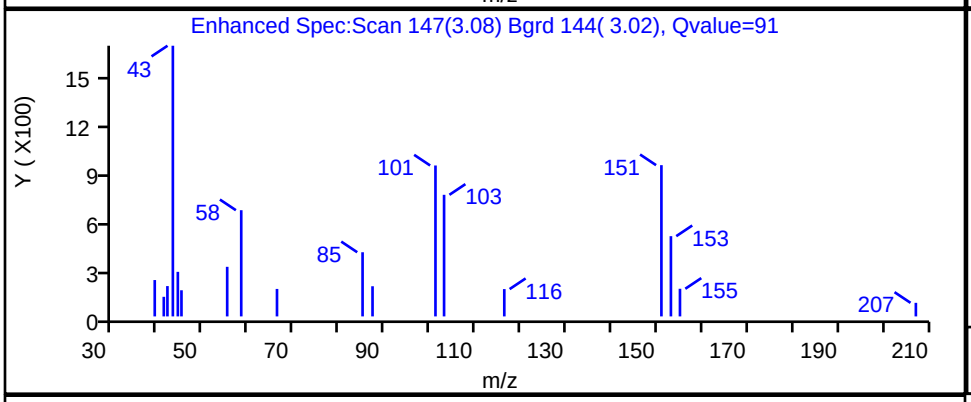
Column: DB-624 (0.18 mm) Detector MS SCAN

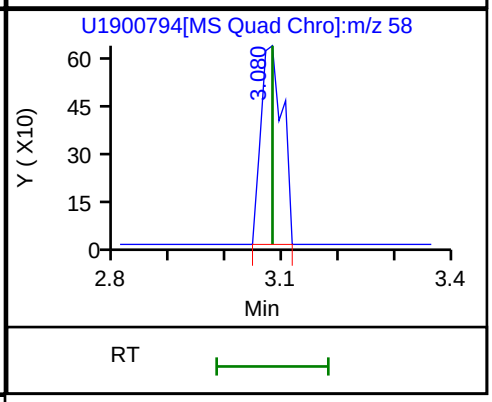
22 Acetone, CAS: 67-64-1

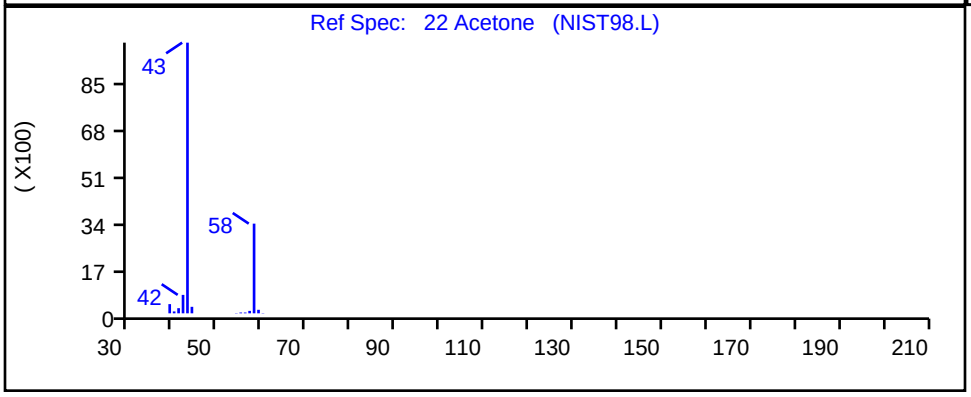
Processing Results











RT	Mass	Response	Amount
3.08	43.00	5518	1.624733
3.08	58.00	1707	

Reviewer: laveyt, 25-Jul-2018 09:52:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Injection Date: 24-Jul-2018 20:04:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

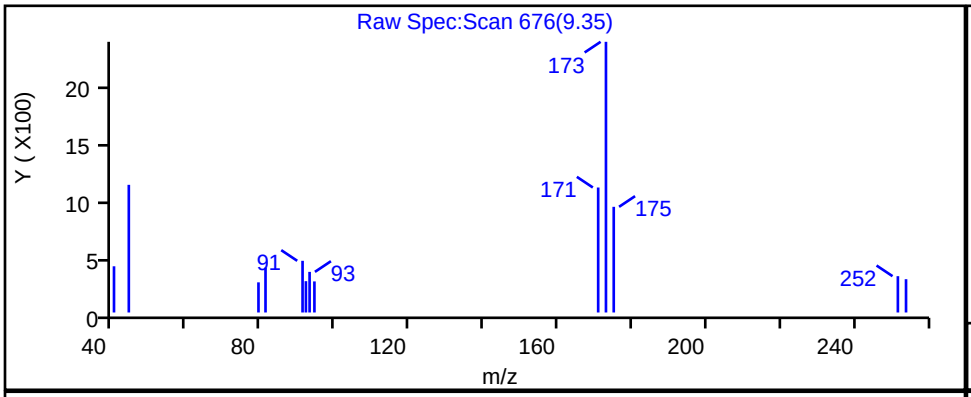
Injection Vol: 5.0 mL Dil. Factor: 1.0000

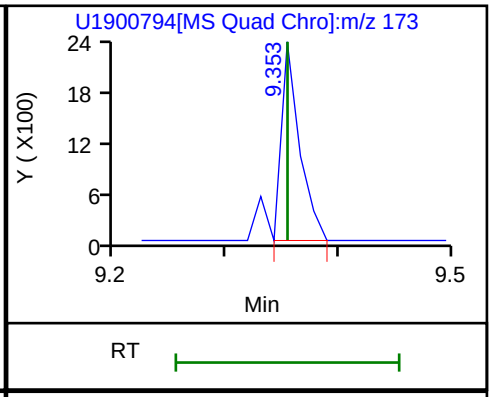
Method: 8260_19 Limit Group: MSV 8260C ICAL

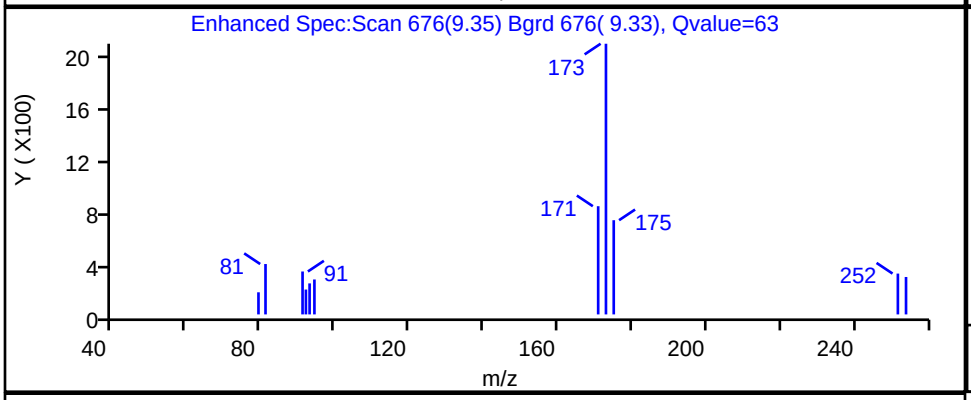
Column: DB-624 (0.18 mm) Detector MS SCAN

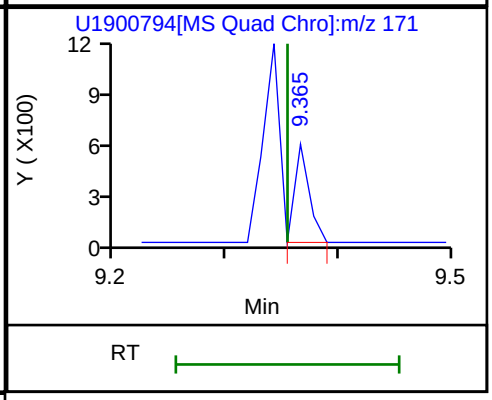
88 Bromoform, CAS: 75-25-2

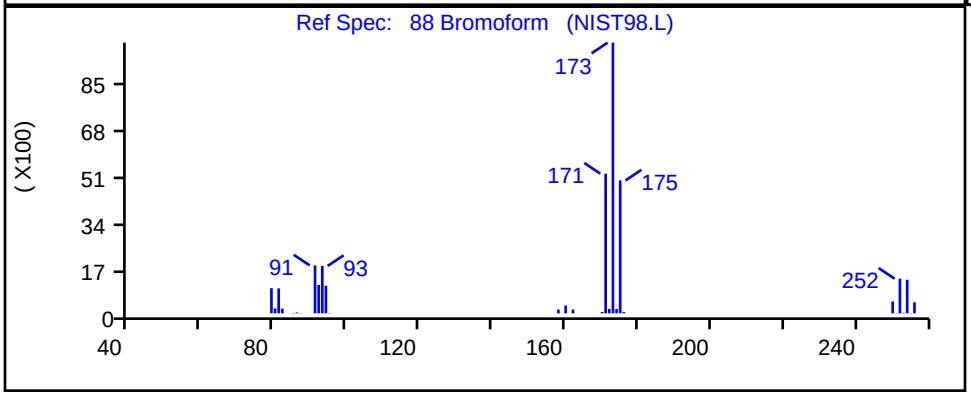
Processing Results











RT	Mass	Response	Amount
9.35	173.00	2603	0.492517
9.37	171.00	513	

Reviewer: laveyt, 25-Jul-2018 09:54:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

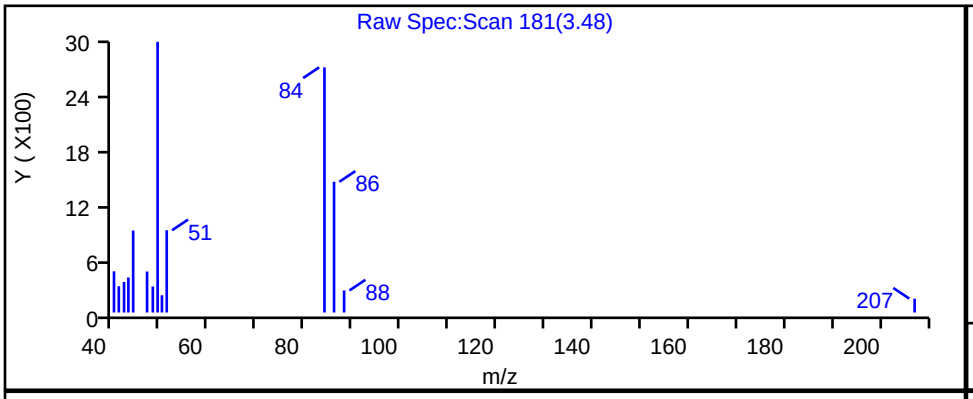
User Disabled Compound Report

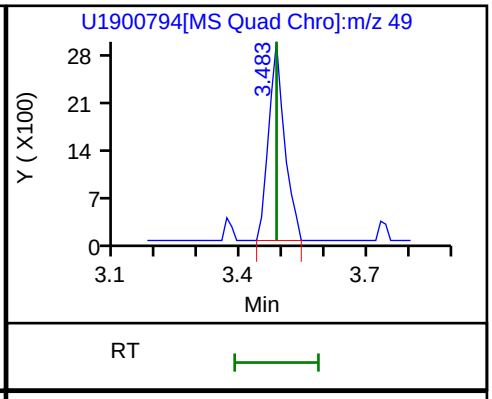
TestAmerica Canton

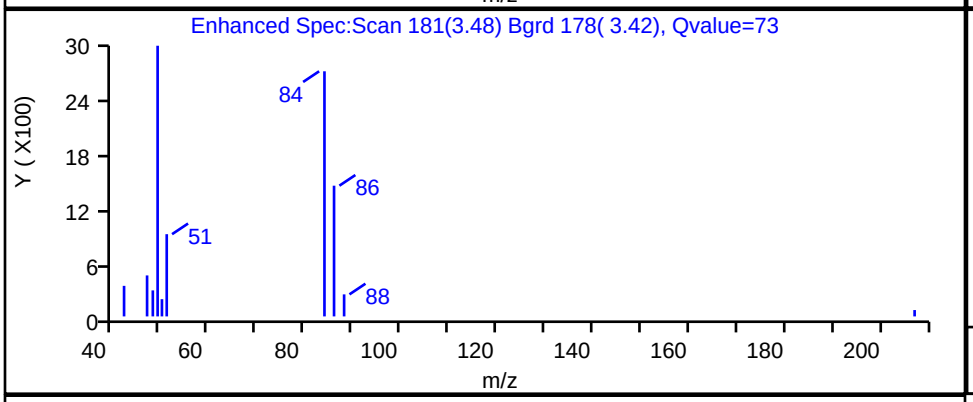
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d				
Injection Date:	24-Jul-2018 20:04:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

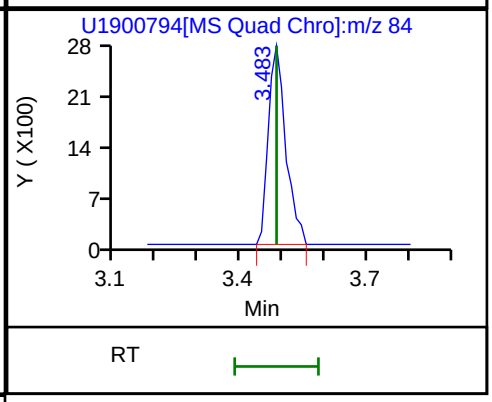
28 Methylene Chloride, CAS: 75-09-2

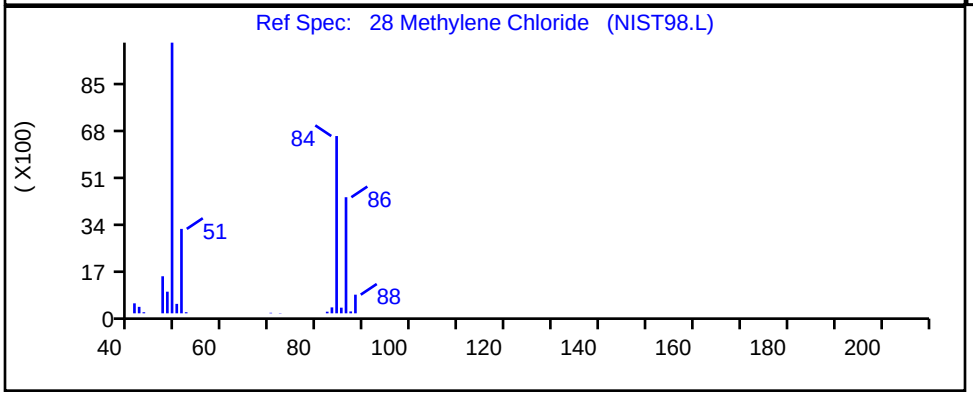
Processing Results











RT	Mass	Response	Amount
3.48	49.00	7846	0.551972
3.48	84.00	7835	

Reviewer: laveyt, 25-Jul-2018 09:52:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

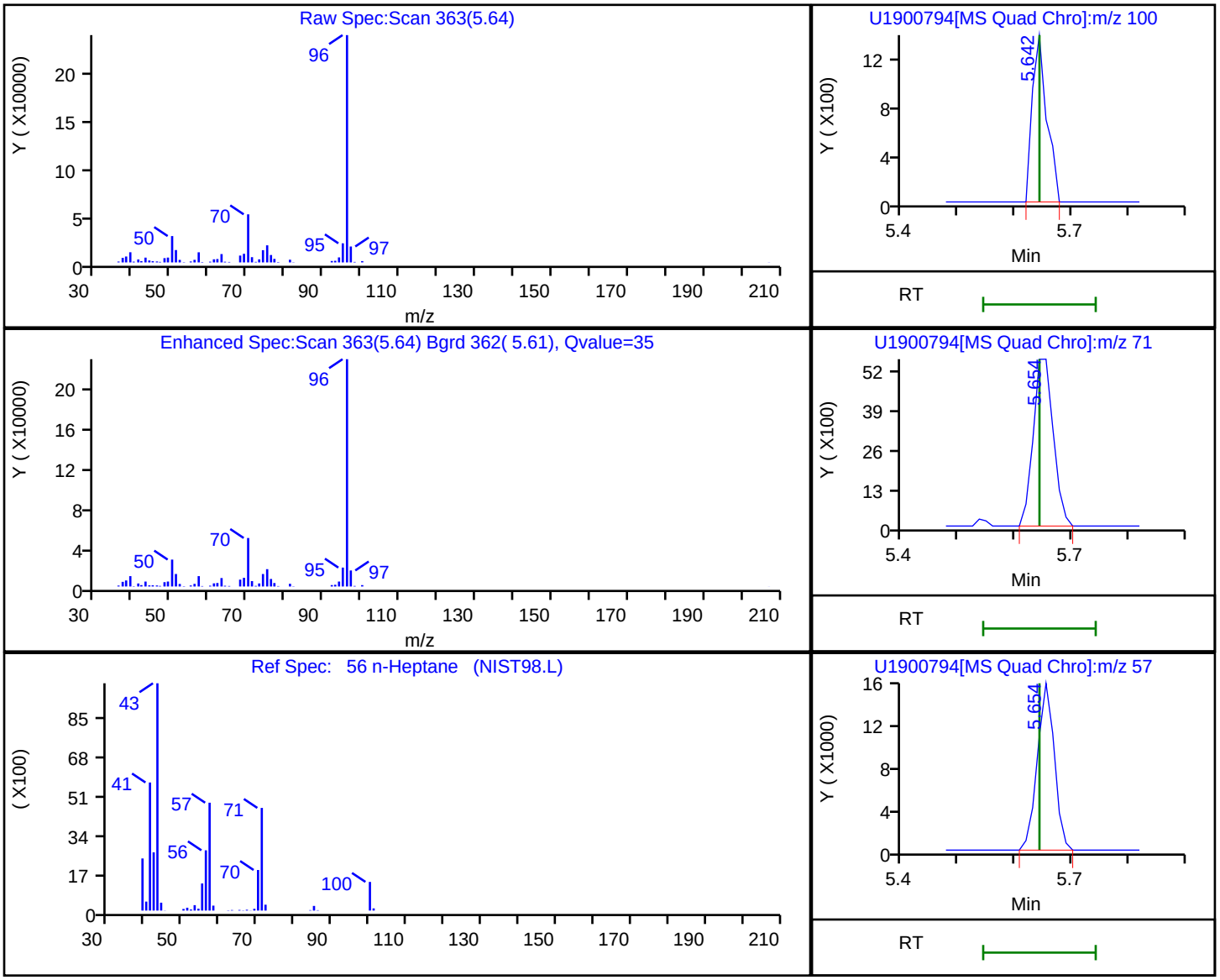
User Disabled Compound Report

TestAmerica Canton

Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d				
Injection Date:	24-Jul-2018 20:04:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

56 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
5.64	100.00	2448	
5.65	71.00	13746	
5.65	57.00	32874	0.539419

Reviewer: laveyt, 25-Jul-2018 09:54:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 337917

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337917

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337917

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337917

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 337917

SDG No.: MSA Frog Mortar Creek

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					

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900802.d
Lims ID: stdA9 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Jul-2018 13:24:03 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-008
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub3

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:29:55 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 14:10:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	917631	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	66	747699	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	69	416540	20.0	20.0	
165 1-Chloro-1-fluoroethane TI	47	2.215	2.226	-0.011	93	977727	80.0	81.3	
25 Acetonitrile	41	3.329	3.329	0.000	99	1541995	800.0	831.3	
36 Isopropyl ether	87	4.171	4.171	0.000	94	842560	80.0	79.4	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	87	1535298	80.0	84.1	
38 Tert-butyl ethyl ether	59	4.491	4.491	0.000	96	2778668	80.0	83.4	
42 Ethyl acetate	43	4.681	4.681	0.000	97	2446844	160.0	177.3	
43 Propionitrile	54	4.681	4.681	0.000	59	1793207	800.0	958.9	
44 Methacrylonitrile	41	4.823	4.823	0.000	91	7168171	800.0	854.5	
55 Tert-amyl methyl ether	73	5.499	5.499	0.000	90	2963984	80.0	83.9	
57 n-Butanol	56	5.891	5.891	0.000	85	949589	2000.0	2211.5	
59 Ethyl acrylate	55	6.057	6.057	0.000	99	1504928	80.0	88.6	
62 Methyl methacrylate	41	6.270	6.270	0.000	91	1902368	160.0	168.6	
66 2-Nitropropane	41	6.638	6.638	0.000	95	599949	160.0	180.2	
78 n-Butyl acetate	43	7.883	7.883	0.000	99	1740666	80.0	86.8	
81 1-Chlorohexane	91	8.488	8.488	0.000	96	1419019	80.0	82.3	
90 Cyclohexanone	55	9.614	9.614	0.000	92	468992	800.0	917.7	
100 Pentachloroethane	167	10.492	10.492	0.000	88	1229564	160.0	170.5	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	96	3957298	80.0	83.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 Benzyl chloride	91	11.049	11.049	0.000	97	2590360	80.0	96.7	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	97	1737829	80.0	81.7	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	89	6003075	160.0	201.2	

Reagents:

vm50is_stk_A_00001	Amount Added: 2.00	Units: uL
vmra9w_00259	Amount Added: 64.00	Units: uL

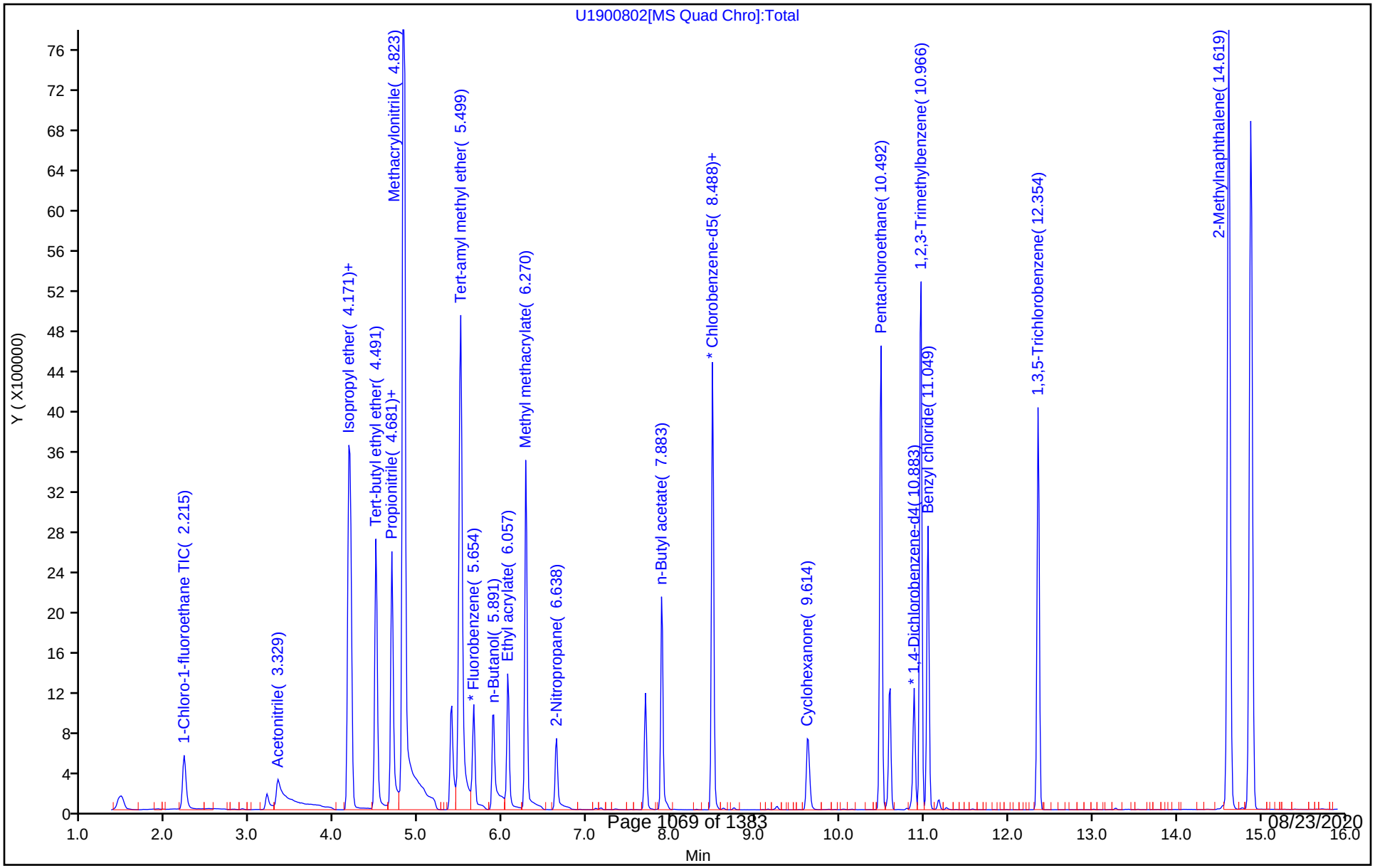
Report Date: 25-Jul-2018 16:29:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900802.d

Injection Date:	25-Jul-2018 13:24:03	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	stdA9 L6			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900803.d
Lims ID: stdA9 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Jul-2018 13:46:28 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-009
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub3

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:29:58 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 14:11:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	903705	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	81	725276	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	74	423134	20.0	20.0	
165 1-Chloro-1-fluoroethane TI	47	2.227	2.226	0.001	94	478166	40.0	40.4	
25 Acetonitrile	41	3.329	3.329	0.000	99	710013	400.0	390.3	
36 Isopropyl ether	87	4.171	4.171	0.000	94	422081	40.0	40.4	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	87	756317	40.0	42.1	
38 Tert-butyl ethyl ether	59	4.492	4.491	0.001	87	1341567	40.0	40.9	
43 Propionitrile	54	4.681	4.681	0.000	62	816037	400.0	443.1	
42 Ethyl acetate	43	4.681	4.681	0.000	97	1070993	80.0	78.8	
44 Methacrylonitrile	41	4.824	4.823	0.001	91	3414371	400.0	413.3	
55 Tert-amyl methyl ether	73	5.511	5.499	0.012	92	1407333	40.0	40.4	
57 n-Butanol	56	5.891	5.891	0.000	85	435974	1000.0	1031.0	
59 Ethyl acrylate	55	6.057	6.057	0.000	93	679802	40.0	40.6	
62 Methyl methacrylate	41	6.270	6.270	0.000	92	875995	80.0	78.8	
66 2-Nitropropane	41	6.638	6.638	0.000	96	265523	80.0	81.0	
78 n-Butyl acetate	43	7.883	7.883	0.000	99	794623	40.0	40.8	
81 1-Chlorohexane	91	8.488	8.488	0.000	96	661168	40.0	39.6	
90 Cyclohexanone	55	9.615	9.614	0.001	91	200187	400.0	403.8	
100 Pentachloroethane	167	10.492	10.492	0.000	87	585743	80.0	80.0	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	94	1932917	40.0	40.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 Benzyl chloride	91	11.049	11.049	0.000	97	1205410	40.0	44.3	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	97	818176	40.0	37.9	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	90	2629143	80.0	86.7	

Reagents:

vm50is_stk_A_00001	Amount Added: 2.00	Units: uL
vmra9w_00259	Amount Added: 32.00	Units: uL

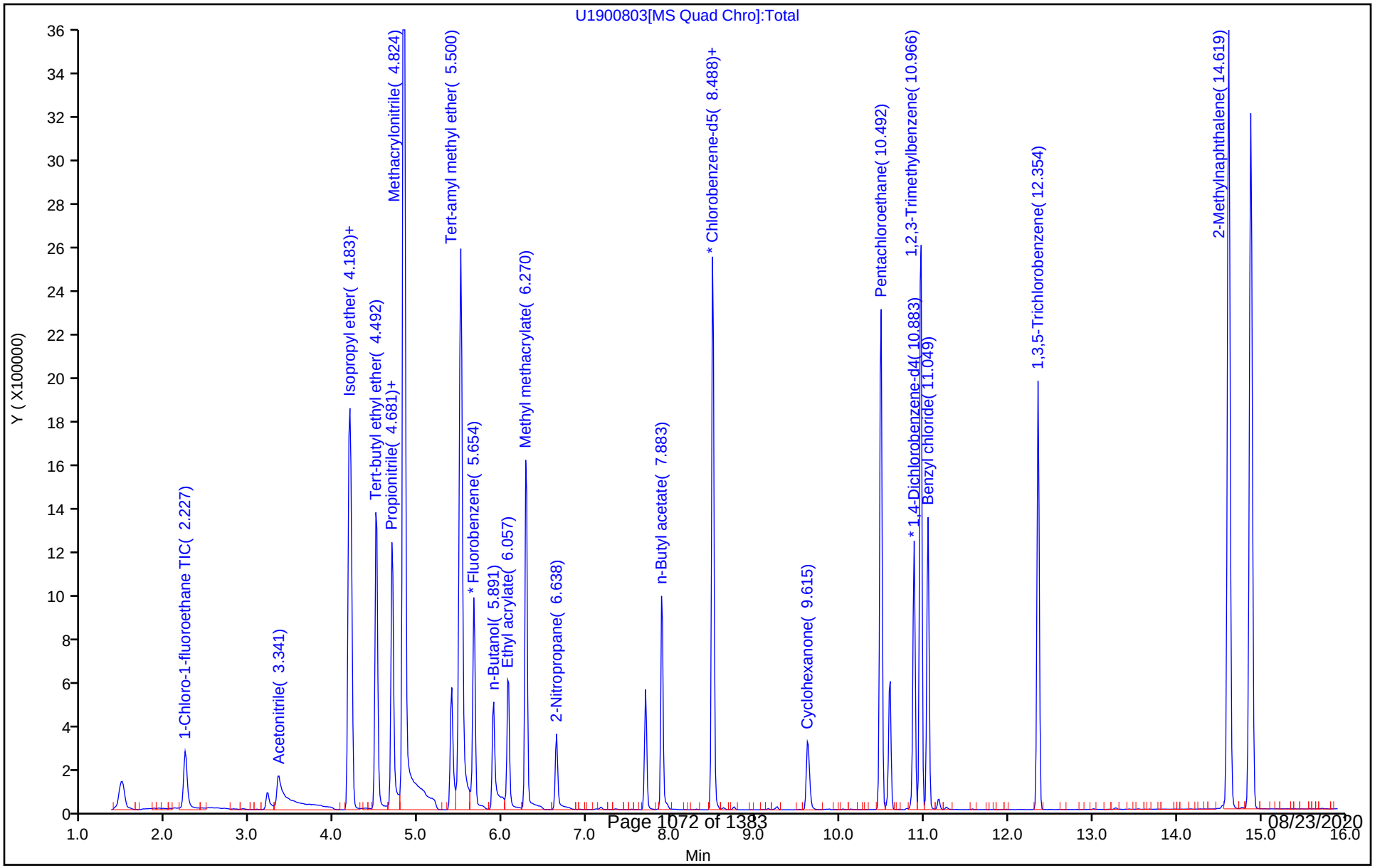
Report Date: 25-Jul-2018 16:29:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900803.d

Injection Date:	25-Jul-2018 13:46:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	stdA9 L5			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900804.d
Lims ID: stdA9 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Jul-2018 14:08:31 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-010
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub3

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:08 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 14:50:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	901786	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	728980	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	83	425754	20.0	20.0	
165 1-Chloro-1-fluoroethane TI	47	2.226	2.226	0.000	93	238507	20.0	20.2	
25 Acetonitrile	41	3.329	3.329	0.000	99	344974	200.0	191.6	
36 Isopropyl ether	87	4.171	4.171	0.000	94	208654	20.0	20.0	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	90	367286	20.0	20.5	
38 Tert-butyl ethyl ether	59	4.491	4.491	0.000	98	673922	20.0	20.6	
42 Ethyl acetate	43	4.681	4.681	0.000	96	528543	40.0	39.0	
43 Propionitrile	54	4.681	4.681	0.000	66	423266	200.0	230.3	
44 Methacrylonitrile	41	4.823	4.823	0.000	91	1651014	200.0	200.3	
55 Tert-amyl methyl ether	73	5.499	5.499	0.000	90	707156	20.0	20.4	
57 n-Butanol	56	5.891	5.891	0.000	85	216043	500.0	512.0	
59 Ethyl acrylate	55	6.057	6.057	0.000	92	343646	20.0	20.6	
62 Methyl methacrylate	41	6.270	6.270	0.000	92	442524	40.0	39.9	
66 2-Nitropropane	41	6.638	6.638	0.000	98	135288	40.0	41.3	
78 n-Butyl acetate	43	7.883	7.883	0.000	99	397090	20.0	20.3	
81 1-Chlorohexane	91	8.488	8.488	0.000	74	324476	20.0	19.3	
90 Cyclohexanone	55	9.614	9.614	0.000	91	99504	200.0	199.7	
100 Pentachloroethane	167	10.492	10.492	0.000	86	304359	40.0	41.3	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	86	1010948	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 Benzyl chloride	91	11.049	11.049	0.000	97	582984	20.0	21.3	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	97	426143	20.0	19.6	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	89	1122673	40.0	36.8	

Reagents:

vm50is_stk_A_00001	Amount Added: 2.00	Units: uL
vmra9w_00259	Amount Added: 16.00	Units: uL

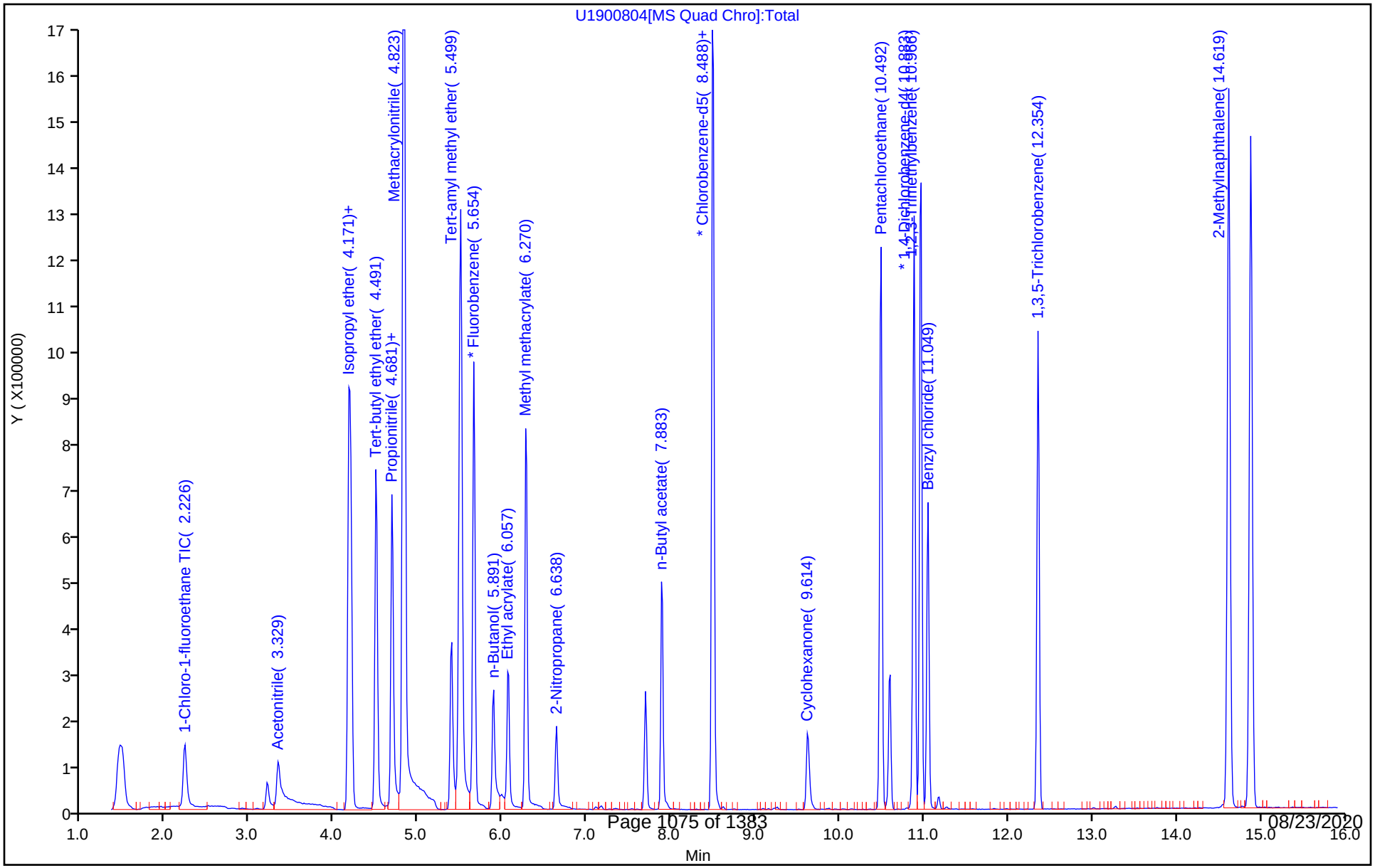
Report Date: 25-Jul-2018 16:30:10 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900804.d

Injection Date:	25-Jul-2018 14:08:31	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	stdA9 L4			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900805.d
Lims ID: stdA9 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Jul-2018 14:30:45 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-011
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub3

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:13 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 14:49:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	915400	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	754374	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	85	426728	20.0	20.0	
165 1-Chloro-1-fluoroethane TI	47	2.215	2.226	-0.011	93	114539	10.0	9.55	
25 Acetonitrile	41	3.329	3.329	0.000	98	154933	100.0	86.5	
36 Isopropyl ether	87	4.171	4.171	0.000	93	100050	10.0	9.45	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	87	176705	10.0	9.70	
38 Tert-butyl ethyl ether	59	4.491	4.491	0.000	83	319412	10.0	9.62	
43 Propionitrile	54	4.681	4.681	0.000	52	174314	100.0	93.4	
42 Ethyl acetate	43	4.681	4.681	0.000	96	255115	20.0	18.5	
44 Methacrylonitrile	41	4.823	4.823	0.000	91	799457	100.0	95.5	
55 Tert-amyl methyl ether	73	5.499	5.499	0.000	89	337094	10.0	9.56	
57 n-Butanol	56	5.891	5.891	0.000	85	96861	250.0	226.1	
59 Ethyl acrylate	55	6.057	6.057	0.000	99	168159	10.0	9.92	
62 Methyl methacrylate	41	6.270	6.270	0.000	90	218113	20.0	19.4	
66 2-Nitropropane	41	6.638	6.638	0.000	96	62364	20.0	18.8	
78 n-Butyl acetate	43	7.883	7.883	0.000	99	199107	10.0	9.84	
81 1-Chlorohexane	91	8.488	8.488	0.000	54	162266	10.0	9.33	
90 Cyclohexanone	55	9.614	9.614	0.000	90	47625	100.0	92.4	
100 Pentachloroethane	167	10.492	10.492	0.000	86	154980	20.0	21.0	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	72	471355	10.0	9.71	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 Benzyl chloride	91	11.049	11.049	0.000	97	252607	10.0	9.20	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	97	201583	10.0	9.25	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	90	535247	20.0	17.5	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmra9w_00259	Amount Added:	8.00	Units: uL

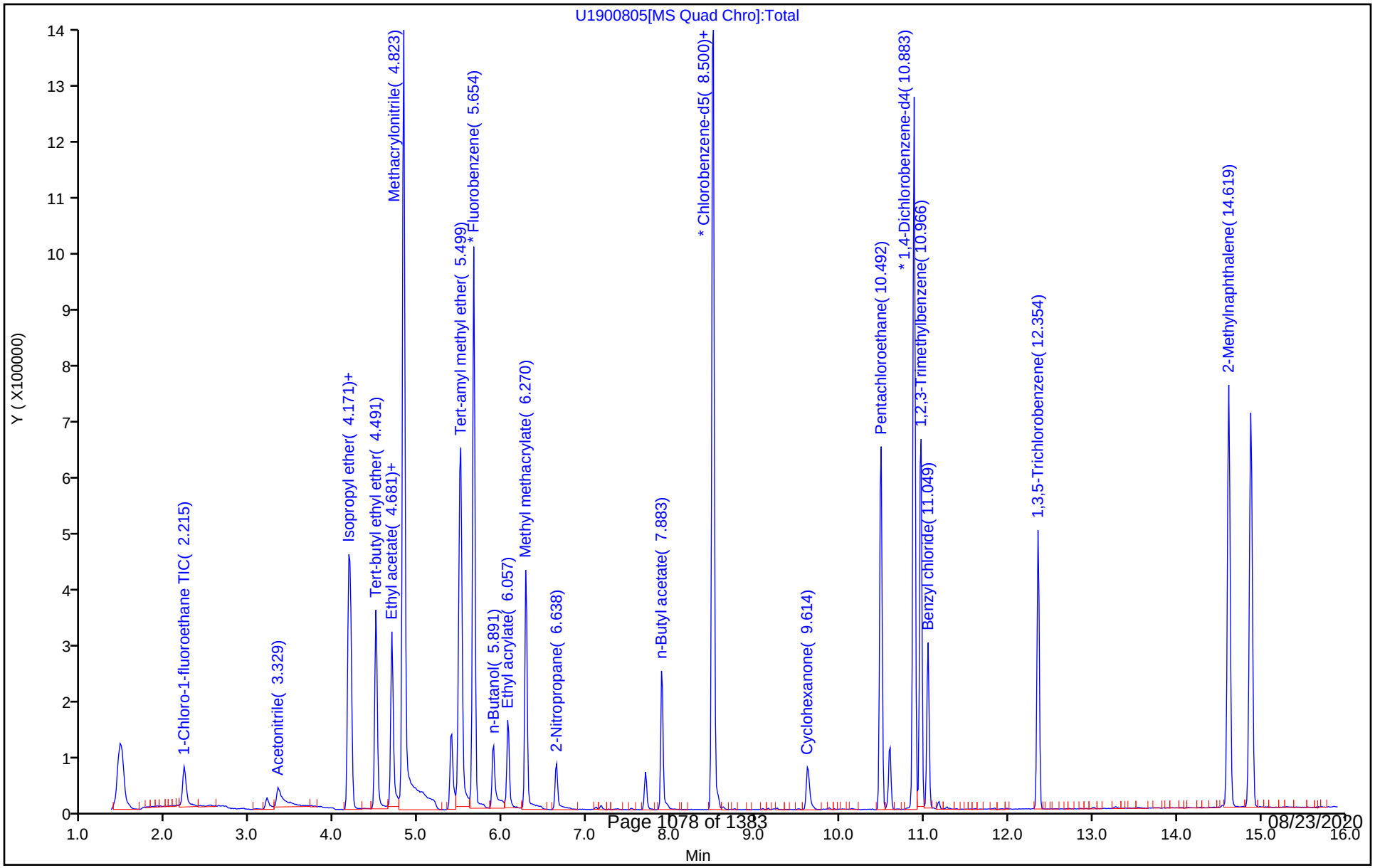
Report Date: 25-Jul-2018 16:30:14 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900805.d

Injection Date:	25-Jul-2018 14:30:45	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	stdA9 L3			Worklist Smp#:	11
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900806.d
Lims ID: stdA9 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Jul-2018 14:52:59 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-012
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub3

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:17 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 15:15:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	900144	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	710298	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	92	416233	20.0	20.0	
165 1-Chloro-1-fluoroethane TI	47	2.227	2.226	0.001	86	11883	1.00	1.01	
25 Acetonitrile	41	3.341	3.329	0.012	88	10939	10.0	9.01	
36 Isopropyl ether	87	4.183	4.171	0.012	93	10198	1.00	0.9798	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	82	15609	1.00	0.8717	
38 Tert-butyl ethyl ether	59	4.503	4.491	0.012	96	32026	1.00	0.9804	
42 Ethyl acetate	43	4.693	4.681	0.012	95	26280	2.00	1.94	
43 Propionitrile	54	4.693	4.681	0.012	62	15532	10.0	8.47	
44 Methacrylonitrile	41	4.824	4.823	0.001	92	82133	10.0	9.98	
55 Tert-amyl methyl ether	73	5.511	5.499	0.012	88	35001	1.00	1.01	
57 n-Butanol	56	5.891	5.891	0.000	65	9875	25.0	23.4	
59 Ethyl acrylate	55	6.069	6.057	0.012	85	15158	1.00	0.9096	
62 Methyl methacrylate	41	6.270	6.270	0.000	88	20747	2.00	1.87	
66 2-Nitropropane	41	6.638	6.638	0.000	82	6028	2.00	1.85	
78 n-Butyl acetate	43	7.883	7.883	0.000	90	17906	1.00	0.9399	
81 1-Chlorohexane	91	8.488	8.488	0.000	33	15739	1.00	0.9613	
90 Cyclohexanone	55	9.614	9.614	0.000	63	4617	10.0	9.51	
100 Pentachloroethane	167	10.492	10.492	0.000	76	12769	2.00	1.77	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	67	47067	1.00	0.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 Benzyl chloride	91	11.049	11.049	0.000	84	23829	1.00	0.8901	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	91	23051	1.00	1.08	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	90	56979	2.00	1.91	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmra9w_00259	Amount Added:	0.80	Units: uL

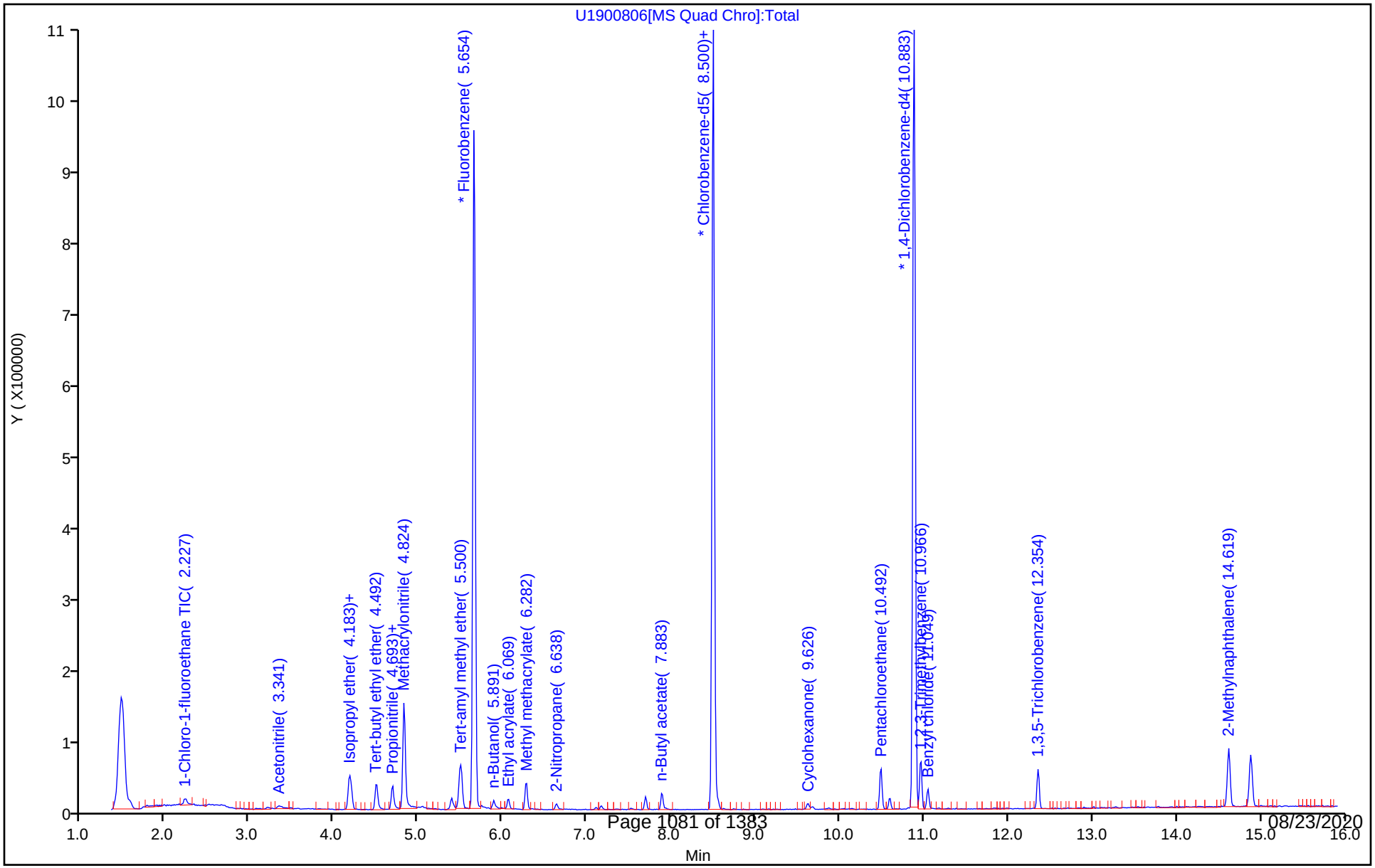
Report Date: 25-Jul-2018 16:30:18 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900806.d

Injection Date:	25-Jul-2018 14:52:59	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	stdA9 L2			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d
Lims ID: stdA9 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Jul-2018 15:15:13 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-013
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub3

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:24 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 15:46:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	908077	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	84	753378	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	92	428059	20.0	20.0	
165 1-Chloro-1-fluoroethane TI	47	2.226	2.226	0.000	78	5953	0.5000	0.5005	
25 Acetonitrile	41	3.341	3.329	0.012	88	6053	5.00	6.31	
36 Isopropyl ether	87	4.171	4.171	0.000	86	5629	0.5000	0.5361	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	71	9314	0.5000	0.5156	
38 Tert-butyl ethyl ether	59	4.491	4.491	0.000	92	15860	0.5000	0.4813	
43 Propionitrile	54	4.681	4.681	0.000	58	7042	5.00	3.81	
42 Ethyl acetate	43	4.681	4.681	0.000	90	14128	1.00	1.03	
44 Methacrylonitrile	41	4.823	4.823	0.000	89	39164	5.00	4.72	
55 Tert-amyl methyl ether	73	5.511	5.499	0.012	90	16704	0.5000	0.4778	
57 n-Butanol	56	5.891	5.891	0.000	79	5296	12.5	12.5	
59 Ethyl acrylate	55	6.069	6.057	0.012	84	7952	0.5000	0.4730	
62 Methyl methacrylate	41	6.270	6.270	0.000	84	11793	1.00	1.06	
66 2-Nitropropane	41	6.638	6.638	0.000	74	3185	1.00	0.9666	
78 n-Butyl acetate	43	7.895	7.883	0.012	86	9641	0.5000	0.4771	
81 1-Chlorohexane	91	8.488	8.488	0.000	32	9741	0.5000	0.5610	
90 Cyclohexanone	55	9.626	9.614	0.012	50	2498	5.00	4.85	
100 Pentachloroethane	167	10.492	10.492	0.000	68	7164	1.00	0.9669	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	62	23009	0.5000	0.4724	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 Benzyl chloride	91	11.049	11.049	0.000	72	11135	0.5000	0.4045	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	67	11406	0.5000	0.5217	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	81	27811	1.00	0.9070	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmra9w_00259	Amount Added:	0.40	Units: uL

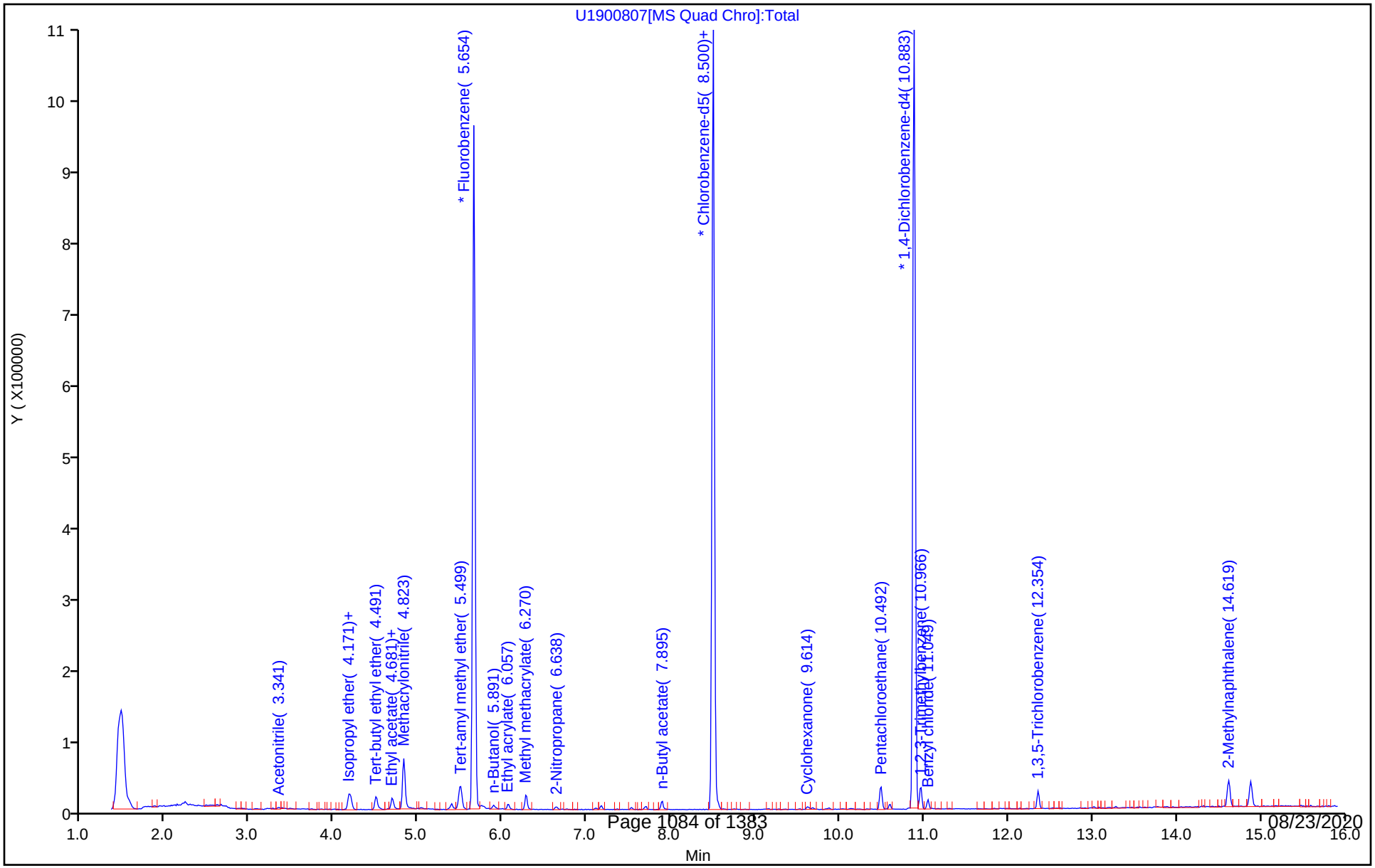
Report Date: 25-Jul-2018 16:30:25 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Injection Date:	25-Jul-2018 15:15:13	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	stdA9 L1			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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-Trichlorotrifluoroethane (Freon 113)	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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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-Trichlorotrifluoroethane (Freon 113)	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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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.: 240-134931-1 Analy Batch No.: 342719

SDG No.: MSA Frog Mortar Creek

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				

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901323.d
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Aug-2018 17:09:10 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:27:48 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 17:37:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	92	960659	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	763247	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	68	415062	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	63	972724	80.0	75.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.345	0.000	100	1067780	80.0	71.9	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	0.000	93	3557725	80.0	77.7	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	90	1273707	80.0	74.0	
9 Dichlorodifluoromethane	85	1.598	1.610	-0.012	88	1552738	80.0	84.0	
10 Chloromethane	50	1.811	1.812	-0.001	78	1059365	80.0	76.5	
12 Butadiene	54	1.894	1.906	-0.012	89	1086231	80.0	78.3	
11 Vinyl chloride	62	1.918	1.918	0.000	82	1135494	80.0	79.3	
13 Bromomethane	94	2.215	2.227	-0.013	84	864872	80.0	77.1	
14 Chloroethane	64	2.286	2.298	-0.012	86	696179	80.0	78.4	
15 Dichlorofluoromethane	67	2.499	2.499	0.000	83	1694878	80.0	77.0	
16 Trichlorofluoromethane	101	2.570	2.582	-0.012	87	1894654	80.0	79.1	
17 Ethyl ether	59	2.807	2.808	-0.001	88	676475	80.0	78.2	
18 Acrolein	56	2.926	2.926	0.000	91	846753	400.0	396.4	
21 1,1-Dichloroethene	61	3.033	3.045	-0.012	90	1382045	80.0	80.2	
20 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.057	-0.012	78	1005400	80.0	81.5	
22 Acetone	43	3.068	3.069	-0.001	79	564923	160.0	150.0	
23 Iodomethane	142	3.187	3.199	-0.012	99	1743886	80.0	78.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	89	2698750	80.0	74.8	
26 3-Chloro-1-propene	41	3.353	3.365	-0.012	81	1304832	80.0	76.7	
27 Methyl acetate	43	3.377	3.377	0.000	96	1658043	160.0	148.3	
28 Methylene Chloride	49	3.483	3.495	-0.012	52	1035294	80.0	75.7	
29 2-Methyl-2-propanol	59	3.578	3.567	0.011	69	963916	800.0	741.0	
30 Acrylonitrile	53	3.685	3.685	0.000	98	3654042	800.0	756.5	
32 trans-1,2-Dichloroethene	61	3.721	3.721	0.000	79	1235776	80.0	76.0	
31 Methyl tert-butyl ether	73	3.732	3.733	-0.001	89	2755910	80.0	82.7	
33 Hexane	57	3.970	3.982	-0.012	93	1419117	80.0	83.8	
34 1,1-Dichloroethane	63	4.100	4.112	-0.012	85	1533220	80.0	78.9	
35 Vinyl acetate	43	4.147	4.148	-0.001	97	1777280	80.0	79.8	
40 cis-1,2-Dichloroethene	96	4.622	4.622	0.000	63	1069027	80.0	77.0	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	66	944363	80.0	80.7	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	96	358198	160.0	157.9	
45 Chlorobromomethane	49	4.835	4.836	-0.001	81	658069	80.0	70.4	
46 Tetrahydrofuran	42	4.883	4.883	0.000	83	753652	160.0	158.3	
47 Chloroform	83	4.906	4.907	-0.001	70	1662428	80.0	78.1	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	91	1637723	80.0	81.7	
49 Cyclohexane	84	5.144	5.144	0.000	75	1531667	80.0	83.5	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	89	1344377	80.0	79.5	
51 Carbon tetrachloride	117	5.238	5.239	-0.001	71	1583649	80.0	82.0	
52 Isobutyl alcohol	41	5.298	5.298	0.000	88	985172	2000.0	1867.6	
53 Benzene	78	5.404	5.417	-0.013	95	3599104	80.0	78.7	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	51	1294416	80.0	74.9	
56 n-Heptane	57	5.642	5.642	0.000	86	734621	80.0	78.7	
58 Trichloroethene	130	5.986	5.986	0.000	88	1193487	80.0	78.6	
60 Methylcyclohexane	83	6.175	6.176	-0.001	89	1805108	80.0	81.9	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	81	831616	80.0	78.4	
63 Dibromomethane	174	6.294	6.294	0.000	85	828119	80.0	75.9	
64 1,4-Dioxane	88	6.306	6.306	0.000	33	204613	1600.0	1782.8	
65 Dichlorobromomethane	83	6.424	6.436	-0.012	93	1298324	80.0	77.7	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	92	1404589	160.0	165.2	
68 cis-1,3-Dichloropropene	75	6.839	6.840	-0.001	91	1486992	80.0	80.1	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	83	2416341	160.0	157.0	
70 Toluene	91	7.171	7.172	-0.001	94	4036837	80.0	78.3	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	83	1466824	80.0	79.8	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	87	1404401	80.0	84.7	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	84	861140	80.0	79.4	
75 Tetrachloroethene	166	7.693	7.693	0.000	93	1317893	80.0	80.1	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	1456758	80.0	79.5	
77 2-Hexanone	43	7.764	7.765	-0.001	79	1965782	160.0	163.6	
79 Chlorodibromomethane	129	7.930	7.919	0.011	87	1113195	80.0	81.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	98	982631	80.0	76.9	
82 Chlorobenzene	112	8.523	8.524	-0.001	92	2721351	80.0	77.1	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	88	1012040	80.0	79.5	
84 Ethylbenzene	106	8.630	8.630	0.000	98	1476959	80.0	80.0	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	1814431	80.0	80.7	
86 o-Xylene	106	9.152	9.152	0.000	87	1703380	80.0	79.8	
87 Styrene	104	9.164	9.164	0.000	93	2970527	80.0	81.2	
88 Bromoform	173	9.353	9.354	-0.001	98	909465	80.0	81.3	
89 Isopropylbenzene	105	9.519	9.520	-0.001	95	4561888	80.0	79.6	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	84	1271933	80.0	79.5	
92 Bromobenzene	156	9.840	9.840	0.000	81	1240722	80.0	77.7	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	65	478494	80.0	78.9	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	62	456736	80.0	80.4	
95 N-Propylbenzene	120	9.946	9.947	-0.001	92	1290307	80.0	80.4	
96 2-Chlorotoluene	126	10.041	10.041	0.000	97	1080636	80.0	79.6	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	3682951	80.0	79.7	
98 4-Chlorotoluene	126	10.148	10.148	0.000	98	1135643	80.0	77.4	
99 tert-Butylbenzene	119	10.468	10.468	0.000	77	3487952	80.0	79.6	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	71	3713592	80.0	79.3	
102 sec-Butylbenzene	105	10.693	10.694	-0.001	94	4762339	80.0	80.7	
103 1,3-Dichlorobenzene	146	10.824	10.812	0.012	95	2223773	80.0	75.9	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	4210777	80.0	81.4	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	94	2269476	80.0	74.9	
108 n-Butylbenzene	91	11.286	11.287	-0.001	96	3438646	80.0	80.8	
109 1,2-Dichlorobenzene	146	11.310	11.298	0.012	98	2045057	80.0	76.9	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	92	422865	80.0	83.2	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	93	1450610	80.0	81.7	
113 Hexachlorobutadiene	225	13.207	13.208	-0.001	88	696652	80.0	76.4	
114 Naphthalene	128	13.279	13.279	0.000	97	4262332	80.0	86.9	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	94	1414051	80.0	88.7	
S 127 Trihalomethanes, Total	1				0		320.0	318.4	
S 164 Total BTEX	1				0		400.0	397.5	
S 124 1,2-Dichloroethene, Total	96				0			153.0	
S 125 1,3-Dichloropropene, Total	75				0			159.9	
S 126 Xylenes, Total	106				0		160.0	160.5	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	64.00	Units: uL
vmarolistdw_00260	Amount Added:	64.00	Units: uL
vmrprimw_00297	Amount Added:	64.00	Units: uL
vm50ss_00333	Amount Added:	64.00	Units: uL

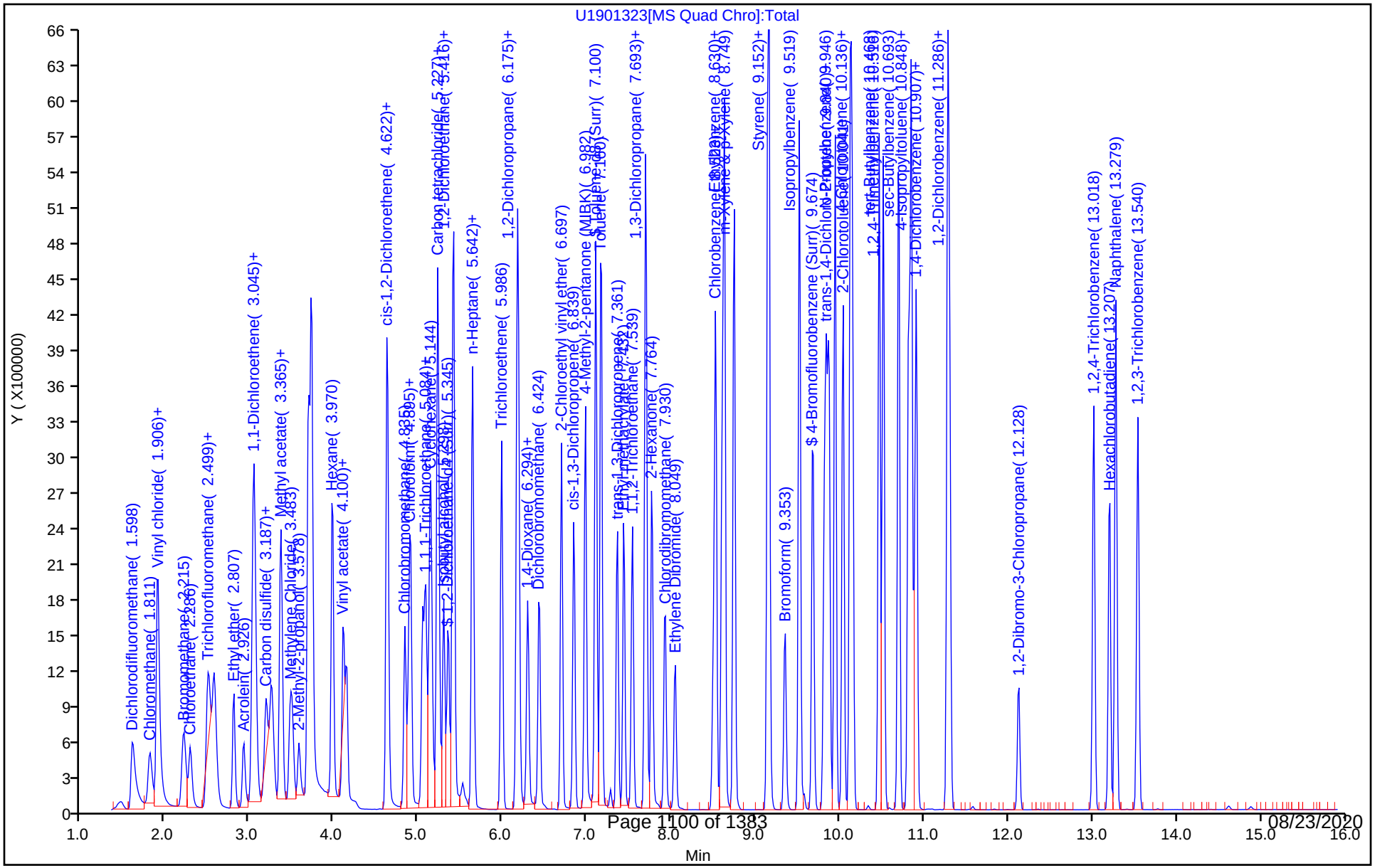
Report Date: 27-Aug-2018 21:27:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901323.d

Injection Date:	27-Aug-2018 17:09:10	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L7			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901324.d
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Aug-2018 17:31:36 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:27:54 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 18:08:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	92	966455	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	761160	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	74	413175	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	59	762443	60.0	58.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.345	0.012	99	841615	60.0	56.3	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	0.000	86	2695636	60.0	59.1	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	90	987516	60.0	57.5	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	80	1180992	60.0	63.5	
10 Chloromethane	50	1.823	1.812	0.011	77	829233	60.0	59.5	
12 Butadiene	54	1.906	1.906	0.000	88	847603	60.0	60.8	
11 Vinyl chloride	62	1.930	1.918	0.012	81	881108	60.0	61.2	
13 Bromomethane	94	2.226	2.227	-0.001	89	669257	60.0	59.3	
14 Chloroethane	64	2.298	2.298	0.000	94	533953	60.0	59.8	
15 Dichlorofluoromethane	67	2.511	2.499	0.012	82	1308784	60.0	59.1	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	88	1458414	60.0	60.6	
17 Ethyl ether	59	2.807	2.808	-0.001	90	521372	60.0	59.9	
18 Acrolein	56	2.926	2.926	0.000	95	622965	300.0	289.9	
21 1,1-Dichloroethene	61	3.045	3.045	0.000	89	1061526	60.0	61.2	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	79	770733	60.0	62.1	
22 Acetone	43	3.068	3.069	-0.001	64	433055	120.0	114.3	
23 Iodomethane	142	3.199	3.199	0.000	99	1332936	60.0	59.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	99	2078244	60.0	57.2	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	74	1011692	60.0	59.1	
27 Methyl acetate	43	3.377	3.377	0.000	96	1276471	120.0	113.5	
28 Methylene Chloride	49	3.483	3.495	-0.012	53	797526	60.0	58.0	
29 2-Methyl-2-propanol	59	3.578	3.567	0.011	86	709594	600.0	542.2	
30 Acrylonitrile	53	3.697	3.685	0.012	98	2849701	600.0	586.4	
32 trans-1,2-Dichloroethene	61	3.732	3.721	0.011	69	967924	60.0	59.1	
31 Methyl tert-butyl ether	73	3.732	3.733	-0.001	89	2079947	60.0	62.0	
33 Hexane	57	3.982	3.982	0.000	89	1056328	60.0	62.0	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	85	1192355	60.0	61.0	
35 Vinyl acetate	43	4.148	4.148	0.000	97	1321142	60.0	58.9	
40 cis-1,2-Dichloroethene	96	4.622	4.622	0.000	63	831715	60.0	59.5	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	90	257675	120.0	112.9	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	62	725393	60.0	61.6	
45 Chlorobromomethane	49	4.835	4.836	-0.001	68	530825	60.0	56.5	
46 Tetrahydrofuran	42	4.883	4.883	0.000	85	566965	120.0	117.7	
47 Chloroform	83	4.906	4.907	-0.001	70	1282514	60.0	59.9	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	89	1245609	60.0	61.8	
49 Cyclohexane	84	5.144	5.144	0.000	85	1159393	60.0	62.8	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	91	1033663	60.0	60.8	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	1199313	60.0	61.7	
52 Isobutyl alcohol	41	5.298	5.298	0.000	82	731439	1500.0	1378.3	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	49	1002994	60.0	57.7	
53 Benzene	78	5.416	5.417	-0.001	94	2748682	60.0	59.8	
56 n-Heptane	57	5.642	5.642	0.000	87	573367	60.0	60.3	
58 Trichloroethene	130	5.986	5.986	0.000	93	909646	60.0	59.6	
60 Methylcyclohexane	83	6.175	6.176	-0.001	89	1399000	60.0	63.1	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	79	634222	60.0	59.5	
63 Dibromomethane	174	6.294	6.294	0.000	86	638964	60.0	58.2	
64 1,4-Dioxane	88	6.306	6.306	0.000	32	147508	1200.0	1277.5	
65 Dichlorobromomethane	83	6.436	6.436	0.000	94	997303	60.0	59.3	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	92	1009556	120.0	118.0	
68 cis-1,3-Dichloropropene	75	6.839	6.840	-0.001	93	1113655	60.0	59.6	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	82	1776570	120.0	114.8	
70 Toluene	91	7.171	7.172	-0.001	94	3039879	60.0	59.1	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	87	1076004	60.0	58.7	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	88	1006534	60.0	60.9	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	84	644677	60.0	59.6	
75 Tetrachloroethene	166	7.693	7.693	0.000	93	999011	60.0	60.9	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	1078694	60.0	59.0	
77 2-Hexanone	43	7.764	7.765	-0.001	79	1411899	120.0	117.8	
79 Chlorodibromomethane	129	7.930	7.919	0.011	87	836499	60.0	61.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	99	733806	60.0	57.6	
82 Chlorobenzene	112	8.523	8.524	-0.001	95	2067581	60.0	58.7	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	88	771705	60.0	60.8	
84 Ethylbenzene	106	8.630	8.630	0.000	98	1118678	60.0	60.8	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	1365436	60.0	60.9	
86 o-Xylene	106	9.152	9.152	0.000	87	1302937	60.0	61.2	
87 Styrene	104	9.152	9.164	-0.012	88	2244503	60.0	61.5	
88 Bromoform	173	9.353	9.354	-0.001	98	669771	60.0	60.0	
89 Isopropylbenzene	105	9.519	9.520	-0.001	95	3527221	60.0	61.7	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	84	951258	60.0	59.8	
92 Bromobenzene	156	9.840	9.840	0.000	87	946835	60.0	59.6	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	63	355186	60.0	58.9	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	61	330637	60.0	58.5	
95 N-Propylbenzene	120	9.946	9.947	-0.001	91	988262	60.0	61.9	
96 2-Chlorotoluene	126	10.041	10.041	0.000	97	834423	60.0	61.7	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	2836427	60.0	61.7	
98 4-Chlorotoluene	126	10.148	10.148	0.000	98	873575	60.0	59.8	
99 tert-Butylbenzene	119	10.468	10.468	0.000	77	2731529	60.0	62.6	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	70	2851175	60.0	61.2	
102 sec-Butylbenzene	105	10.693	10.694	-0.001	94	3724288	60.0	63.4	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	90	1726981	60.0	59.2	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	3219084	60.0	62.5	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	94	1749380	60.0	58.0	
108 n-Butylbenzene	91	11.275	11.287	-0.012	98	2635155	60.0	62.2	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	97	1553579	60.0	58.6	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	91	308798	60.0	61.0	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	1042664	60.0	59.0	
113 Hexachlorobutadiene	225	13.208	13.208	0.000	88	552719	60.0	60.9	
114 Naphthalene	128	13.279	13.279	0.000	96	2984863	60.0	61.1	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	94	957428	60.0	60.4	
S 164 Total BTEX	1				0		300.0	301.7	
S 127 Trihalomethanes, Total	1				0		240.0	240.5	
S 124 1,2-Dichloroethene, Total	96				0			118.7	
S 125 1,3-Dichloropropene, Total	75				0			118.3	
S 126 Xylenes, Total	106				0		120.0	122.1	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	48.00	Units: uL
vmarolistdw_00260	Amount Added:	48.00	Units: uL
vmrprimw_00297	Amount Added:	48.00	Units: uL
vm50ss_00333	Amount Added:	48.00	Units: uL

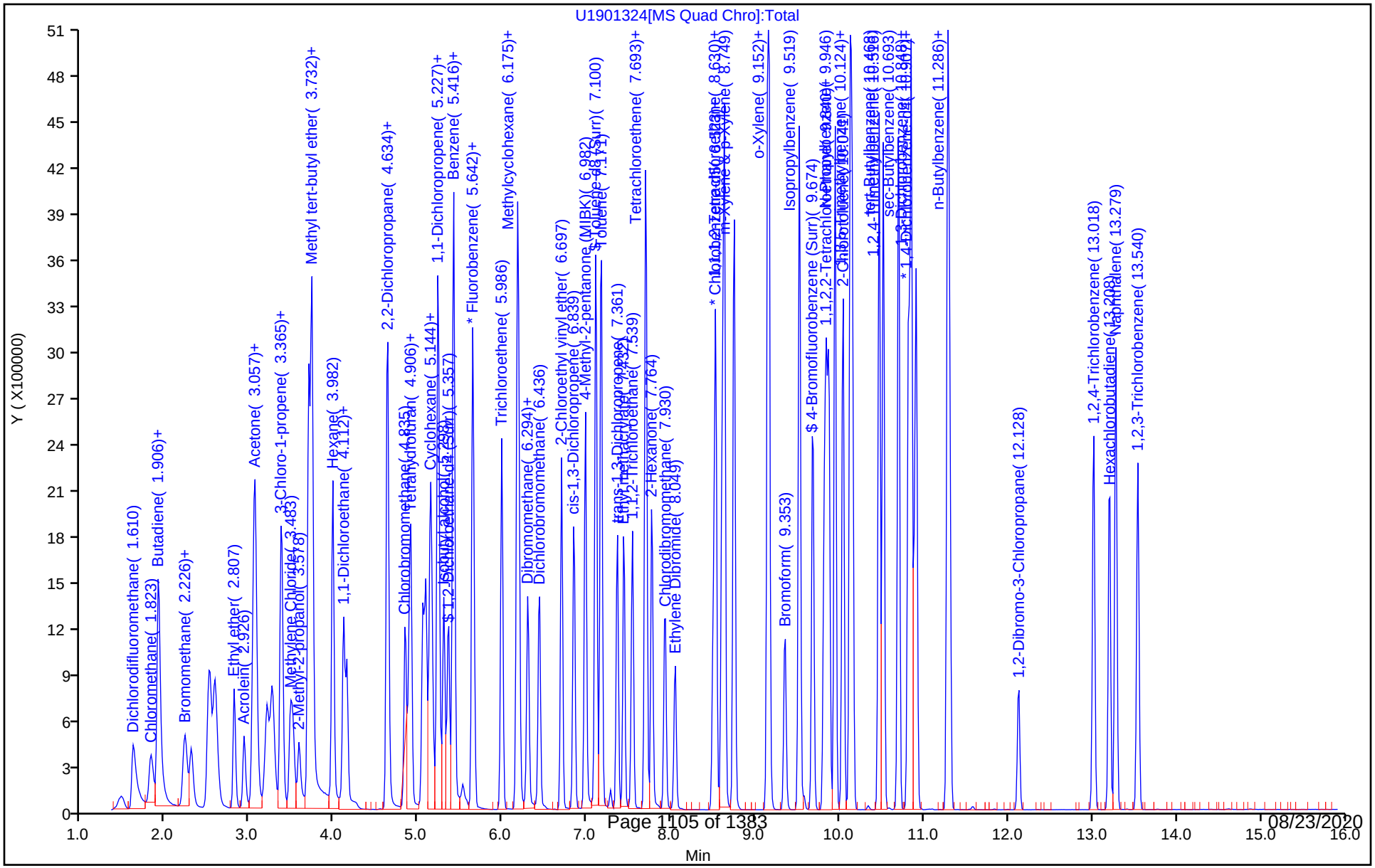
Report Date: 27-Aug-2018 21:27:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901324.d

Injection Date:	27-Aug-2018 17:31:36	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L6			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901325.d
Lims ID: std8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Aug-2018 17:53:51 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-009
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:08 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 18:49:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	95	978140	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	783329	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	75	427081	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	60	512374	40.0	38.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.345	0.000	100	579615	40.0	38.3	
$ 6 Toluene-d8 (Surr)	98	7.101	7.101	0.000	86	1855495	40.0	39.5	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	89	674745	40.0	38.2	
9 Dichlorodifluoromethane	85	1.598	1.610	-0.012	88	792590	40.0	42.1	
10 Chloromethane	50	1.812	1.812	0.000	78	546909	40.0	38.8	
12 Butadiene	54	1.895	1.906	-0.011	89	552757	40.0	39.2	
11 Vinyl chloride	62	1.918	1.918	0.000	83	589426	40.0	40.4	
13 Bromomethane	94	2.215	2.227	-0.012	85	442826	40.0	38.8	
14 Chloroethane	64	2.298	2.298	0.000	82	353502	40.0	39.1	
15 Dichlorofluoromethane	67	2.499	2.499	0.000	83	878380	40.0	39.2	
16 Trichlorofluoromethane	101	2.571	2.582	-0.012	87	978643	40.0	40.2	
17 Ethyl ether	59	2.808	2.808	0.000	88	350377	40.0	39.8	
18 Acrolein	56	2.926	2.926	0.000	95	417769	200.0	192.1	
21 1,1-Dichloroethene	61	3.033	3.045	-0.012	90	706289	40.0	40.2	
20 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.057	-0.012	72	512861	40.0	40.8	
22 Acetone	43	3.069	3.069	0.000	82	298968	80.0	78.0	
23 Iodomethane	142	3.187	3.199	-0.012	99	888035	40.0	39.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	89	1372316	40.0	37.3	
26 3-Chloro-1-propene	41	3.353	3.365	-0.012	73	662138	40.0	38.2	
27 Methyl acetate	43	3.377	3.377	0.000	96	886871	80.0	77.9	
28 Methylene Chloride	49	3.484	3.495	-0.011	51	534613	40.0	38.4	
29 2-Methyl-2-propanol	59	3.578	3.567	0.011	69	542388	400.0	409.5	
30 Acrylonitrile	53	3.685	3.685	0.000	97	1951040	400.0	396.7	
32 trans-1,2-Dichloroethene	61	3.721	3.721	0.000	74	639131	40.0	38.6	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	87	1349603	40.0	39.8	
33 Hexane	57	3.982	3.982	0.000	92	704185	40.0	40.9	
34 1,1-Dichloroethane	63	4.100	4.112	-0.012	85	790957	40.0	40.0	
35 Vinyl acetate	43	4.148	4.148	0.000	97	903595	40.0	39.8	
40 cis-1,2-Dichloroethene	96	4.622	4.622	0.000	69	545012	40.0	38.6	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	66	491954	40.0	41.3	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	96	181887	80.0	78.7	
45 Chlorobromomethane	49	4.836	4.836	0.000	80	350082	40.0	36.8	
46 Tetrahydrofuran	42	4.883	4.883	0.000	84	405539	80.0	82.5	
47 Chloroform	83	4.907	4.907	0.000	68	863672	40.0	39.8	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	90	836381	40.0	41.0	
49 Cyclohexane	84	5.144	5.144	0.000	75	776128	40.0	41.6	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	89	687882	40.0	40.0	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	807965	40.0	41.1	
52 Isobutyl alcohol	41	5.298	5.298	0.000	88	540692	1000.0	1006.7	
53 Benzene	78	5.405	5.417	-0.012	95	1843426	40.0	39.6	
54 1,2-Dichloroethane	62	5.417	5.417	0.000	51	680627	40.0	38.7	
56 n-Heptane	57	5.642	5.642	0.000	84	401639	40.0	40.7	
58 Trichloroethene	130	5.986	5.986	0.000	92	608172	40.0	39.4	
60 Methylcyclohexane	83	6.176	6.176	0.000	88	929492	40.0	41.4	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	80	433884	40.0	40.2	
63 Dibromomethane	174	6.294	6.294	0.000	86	428543	40.0	38.6	
64 1,4-Dioxane	88	6.306	6.306	0.000	35	108387	800.0	927.5	
65 Dichlorobromomethane	83	6.436	6.436	0.000	93	670319	40.0	39.4	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	92	710198	80.0	82.0	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	92	757475	40.0	40.1	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	82	1267570	80.0	80.9	
70 Toluene	91	7.172	7.172	0.000	95	2085055	40.0	39.4	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	83	737016	40.0	39.1	
72 Ethyl methacrylate	69	7.433	7.433	0.000	88	711262	40.0	41.8	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	84	445968	40.0	40.1	
75 Tetrachloroethene	166	7.693	7.693	0.000	92	675866	40.0	40.0	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	737142	40.0	39.2	
77 2-Hexanone	43	7.765	7.765	0.000	79	1016835	80.0	82.4	
79 Chlorodibromomethane	129	7.931	7.919	0.012	87	568645	40.0	40.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	99	500324	40.0	38.2	
82 Chlorobenzene	112	8.524	8.524	0.000	97	1418747	40.0	39.1	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	87	524311	40.0	40.1	
84 Ethylbenzene	106	8.630	8.630	0.000	98	765441	40.0	40.4	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	934583	40.0	40.5	
86 o-Xylene	106	9.152	9.152	0.000	87	890297	40.0	40.6	
87 Styrene	104	9.164	9.164	0.000	93	1534422	40.0	40.9	
88 Bromoform	173	9.354	9.354	0.000	98	462320	40.0	40.2	
89 Isopropylbenzene	105	9.520	9.520	0.000	96	2399226	40.0	40.8	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	88	660294	40.0	40.1	
92 Bromobenzene	156	9.840	9.840	0.000	81	647055	40.0	39.4	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	70	250203	40.0	40.1	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	61	228469	40.0	39.1	
95 N-Propylbenzene	120	9.947	9.947	0.000	91	674293	40.0	40.9	
96 2-Chlorotoluene	126	10.041	10.041	0.000	97	562614	40.0	40.3	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	1929863	40.0	40.6	
98 4-Chlorotoluene	126	10.148	10.148	0.000	98	588358	40.0	39.0	
99 tert-Butylbenzene	119	10.468	10.468	0.000	77	1854784	40.0	41.1	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	70	1949684	40.0	40.5	
102 sec-Butylbenzene	105	10.694	10.694	0.000	94	2501406	40.0	41.2	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	90	1165661	40.0	38.7	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	91	2177763	40.0	40.9	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	94	1194426	40.0	38.3	
108 n-Butylbenzene	91	11.287	11.287	0.000	97	1789693	40.0	40.9	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	96	1053180	40.0	38.5	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	92	210526	40.0	40.2	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	91	675526	40.0	37.0	
113 Hexachlorobutadiene	225	13.208	13.208	0.000	88	358938	40.0	38.3	
114 Naphthalene	128	13.279	13.279	0.000	96	1949946	40.0	38.6	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	93	606712	40.0	37.0	
S 127 Trihalomethanes, Total	1				0		160.0	160.0	
S 164 Total BTEX	1				0		200.0	200.5	
S 124 1,2-Dichloroethene, Total	96				0			77.1	
S 125 1,3-Dichloropropene, Total	75				0			79.1	
S 126 Xylenes, Total	106				0		80.0	81.1	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	32.00	Units: uL
vmarolistdw_00260	Amount Added:	32.00	Units: uL
vmrprimw_00297	Amount Added:	32.00	Units: uL
vm50ss_00333	Amount Added:	32.00	Units: uL

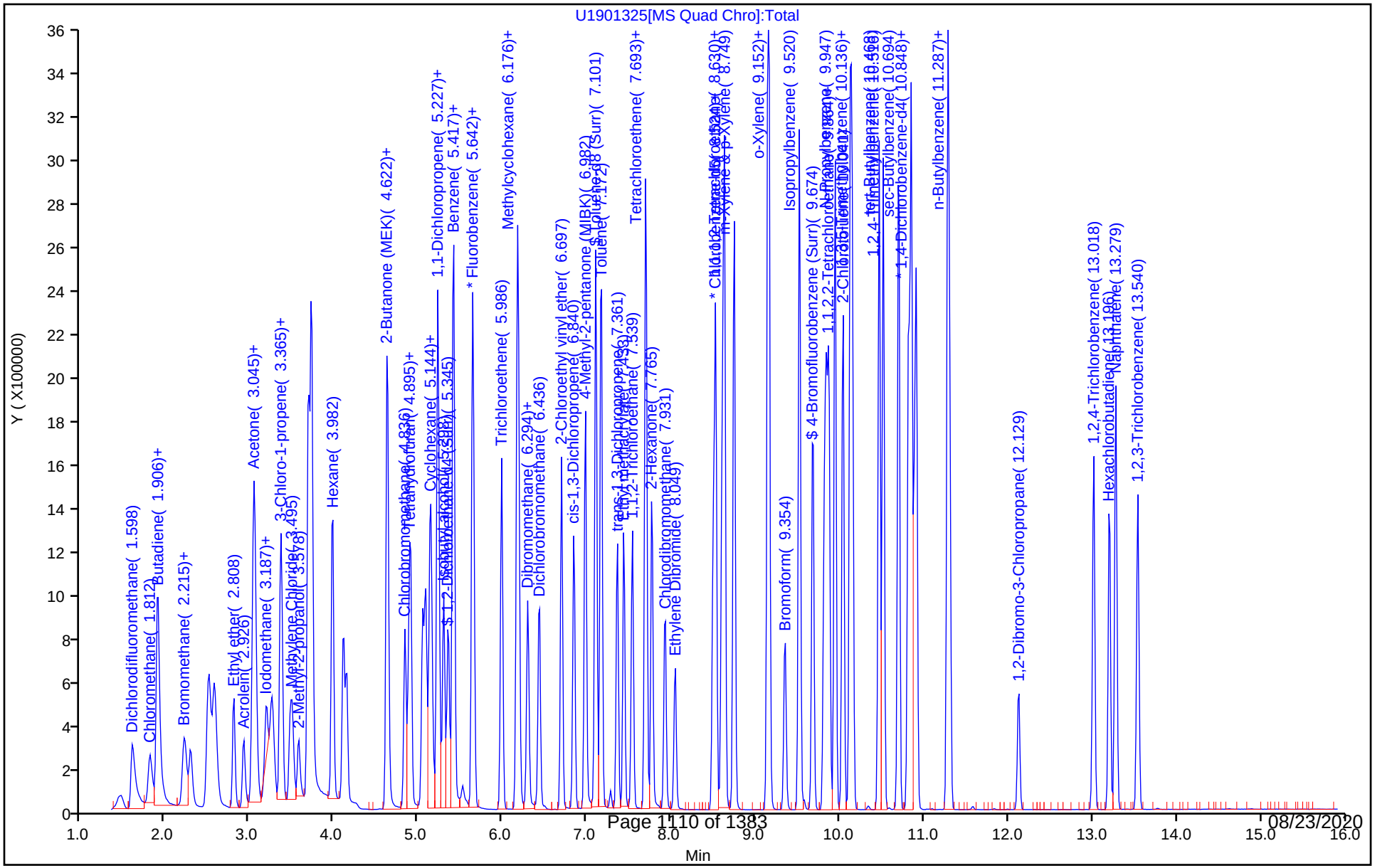
Report Date: 27-Aug-2018 21:28:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901325.d

Injection Date:	27-Aug-2018 17:53:51	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L5			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901326.d
Lims ID: ICIS L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 27-Aug-2018 18:16:31 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-010
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:20 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 18:47:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	97	972482	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	783101	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	86	430906	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	59	251584	20.0	19.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.345	0.000	99	285917	20.0	19.0	
$ 6 Toluene-d8 (Surr)	98	7.101	7.101	0.000	86	907923	20.0	19.3	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	90	337411	20.0	19.1	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	66	366772	20.0	19.6	
10 Chloromethane	50	1.812	1.812	0.000	77	267203	20.0	19.1	
12 Butadiene	54	1.906	1.906	0.000	88	275330	20.0	19.6	
11 Vinyl chloride	62	1.918	1.918	0.000	70	286894	20.0	19.8	
13 Bromomethane	94	2.227	2.227	0.000	90	219651	20.0	19.3	
14 Chloroethane	64	2.298	2.298	0.000	95	172968	20.0	19.2	
15 Dichlorofluoromethane	67	2.499	2.499	0.000	83	434465	20.0	19.5	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	86	483006	20.0	19.9	
17 Ethyl ether	59	2.808	2.808	0.000	88	172224	20.0	19.7	
18 Acrolein	56	2.926	2.926	0.000	95	220720	100.0	102.1	
21 1,1-Dichloroethene	61	3.045	3.045	0.000	89	348307	20.0	20.0	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	80	249289	20.0	20.0	
22 Acetone	43	3.069	3.069	0.000	68	146204	40.0	38.3	
23 Iodomethane	142	3.199	3.199	0.000	99	444884	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	99	683722	20.0	18.7	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	80	326833	20.0	19.0	
27 Methyl acetate	43	3.377	3.377	0.000	96	440913	40.0	39.0	
28 Methylene Chloride	49	3.495	3.495	0.000	55	271471	20.0	19.6	
29 2-Methyl-2-propanol	59	3.567	3.567	0.000	51	252801	200.0	192.0	
30 Acrylonitrile	53	3.685	3.685	0.000	98	950386	200.0	194.4	
32 trans-1,2-Dichloroethene	61	3.721	3.721	0.000	72	317885	20.0	19.3	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	78	653045	20.0	19.4	
33 Hexane	57	3.982	3.982	0.000	91	347875	20.0	20.3	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	85	387941	20.0	19.7	
35 Vinyl acetate	43	4.148	4.148	0.000	97	445770	20.0	19.8	
40 cis-1,2-Dichloroethene	96	4.622	4.622	0.000	69	272438	20.0	19.4	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	95	88909	40.0	38.7	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	63	212094	20.0	17.9	
45 Chlorobromomethane	49	4.836	4.836	0.000	81	175479	20.0	18.6	
46 Tetrahydrofuran	42	4.883	4.883	0.000	84	199816	40.0	39.6	
47 Chloroform	83	4.907	4.907	0.000	70	427697	20.0	19.8	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	89	398309	20.0	19.6	
49 Cyclohexane	84	5.144	5.144	0.000	75	372006	20.0	20.0	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	90	337392	20.0	19.7	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	384700	20.0	19.7	
52 Isobutyl alcohol	41	5.298	5.298	0.000	88	263438	500.0	493.3	
54 1,2-Dichloroethane	62	5.417	5.417	0.000	51	341638	20.0	19.5	
53 Benzene	78	5.417	5.417	0.000	94	917150	20.0	19.8	
56 n-Heptane	57	5.642	5.642	0.000	76	210893	20.0	19.9	
58 Trichloroethene	130	5.986	5.986	0.000	92	299123	20.0	19.5	
60 Methylcyclohexane	83	6.176	6.176	0.000	88	445411	20.0	20.0	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	81	214790	20.0	20.0	
63 Dibromomethane	174	6.294	6.294	0.000	87	213090	20.0	19.3	
64 1,4-Dioxane	88	6.306	6.306	0.000	35	50489	400.0	434.6	
65 Dichlorobromomethane	83	6.436	6.436	0.000	93	336655	20.0	19.9	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	93	353595	40.0	41.1	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	92	372198	20.0	19.8	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	83	627983	40.0	40.3	
70 Toluene	91	7.172	7.172	0.000	94	1040131	20.0	19.7	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	85	363416	20.0	19.3	
72 Ethyl methacrylate	69	7.433	7.433	0.000	88	349427	20.0	20.5	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	86	219105	20.0	19.7	
75 Tetrachloroethene	166	7.693	7.693	0.000	92	332664	20.0	19.7	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	82	366944	20.0	19.5	
77 2-Hexanone	43	7.765	7.765	0.000	80	508487	40.0	41.2	
79 Chlorodibromomethane	129	7.919	7.919	0.000	89	282195	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	98	257341	20.0	19.6	
82 Chlorobenzene	112	8.524	8.524	0.000	97	704913	20.0	19.5	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	87	257026	20.0	19.7	
84 Ethylbenzene	106	8.630	8.630	0.000	98	380861	20.0	20.1	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	466651	20.0	20.2	
86 o-Xylene	106	9.152	9.152	0.000	87	441487	20.0	20.1	
87 Styrene	104	9.164	9.164	0.000	93	759556	20.0	20.2	
88 Bromoform	173	9.354	9.354	0.000	98	222929	20.0	19.4	
89 Isopropylbenzene	105	9.520	9.520	0.000	95	1179370	20.0	20.0	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	88	328526	20.0	19.8	
92 Bromobenzene	156	9.840	9.840	0.000	88	324573	20.0	19.6	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	71	124262	20.0	19.7	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	65	114842	20.0	19.5	
95 N-Propylbenzene	120	9.947	9.947	0.000	96	332244	20.0	20.0	
96 2-Chlorotoluene	126	10.041	10.041	0.000	96	281753	20.0	20.0	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	93	945225	20.0	19.7	
98 4-Chlorotoluene	126	10.148	10.148	0.000	98	302046	20.0	19.8	
99 tert-Butylbenzene	119	10.468	10.468	0.000	78	904165	20.0	19.9	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	72	965487	20.0	19.9	
102 sec-Butylbenzene	105	10.694	10.694	0.000	94	1216655	20.0	19.9	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	84	589299	20.0	19.4	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	1061108	20.0	19.8	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	92	595729	20.0	19.0	
108 n-Butylbenzene	91	11.287	11.287	0.000	96	873706	20.0	19.8	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	97	532075	20.0	19.3	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	91	102189	20.0	19.4	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	335760	20.0	18.2	
113 Hexachlorobutadiene	225	13.208	13.208	0.000	88	175651	20.0	18.6	
114 Naphthalene	128	13.279	13.279	0.000	96	923339	20.0	18.1	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	92	295011	20.0	17.8	
S 164 Total BTEX	1				0		100.0	100.0	
S 127 Trihalomethanes, Total	1				0		80.0	79.3	
S 126 Xylenes, Total	106				0		40.0	40.4	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	16.00	Units: uL
vmarolistdw_00260	Amount Added:	16.00	Units: uL
vmrprimw_00297	Amount Added:	16.00	Units: uL
vm50ss_00333	Amount Added:	16.00	Units: uL

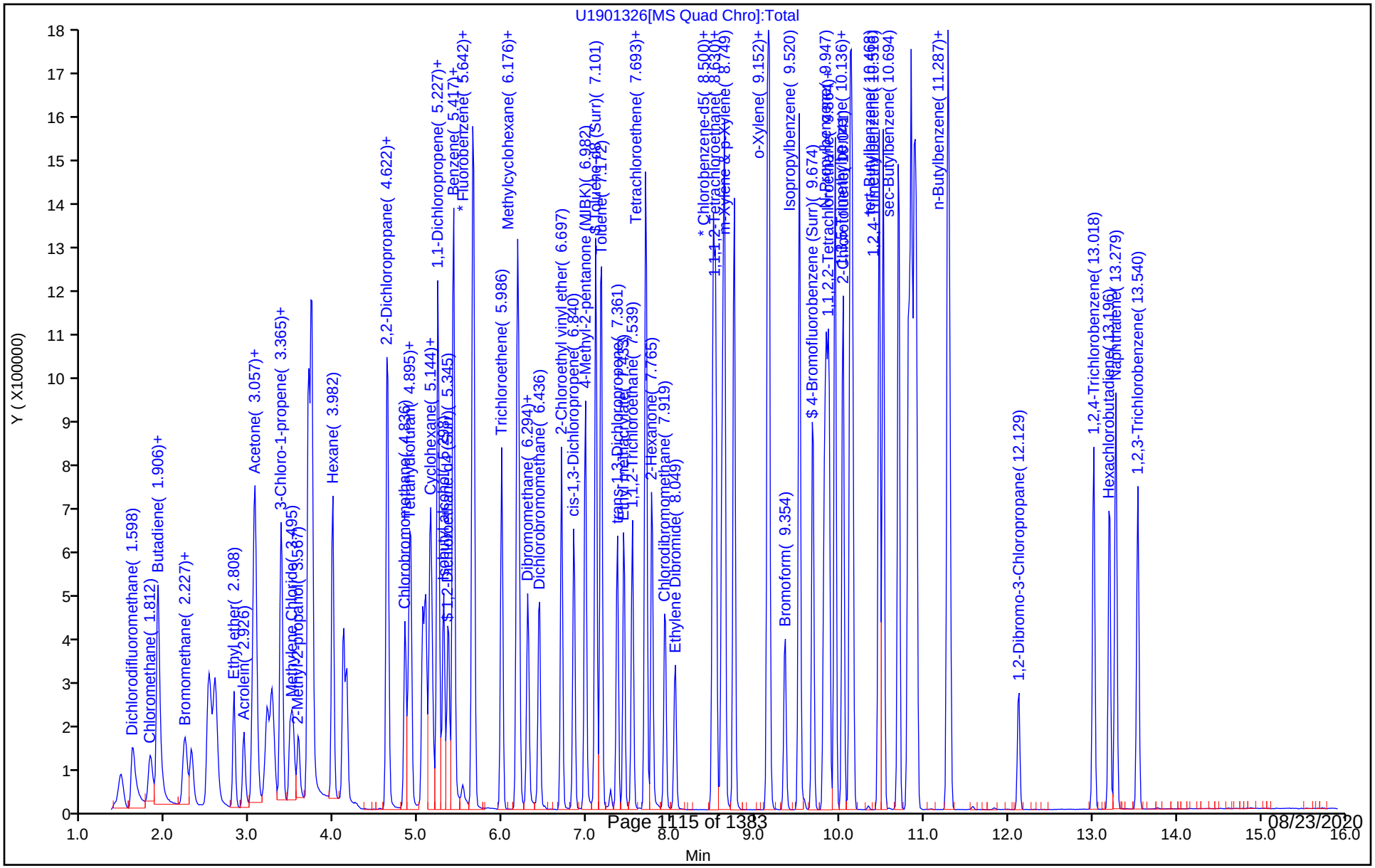
Report Date: 27-Aug-2018 21:28:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901326.d

Injection Date:	27-Aug-2018 18:16:31	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	ICIS L4			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901327.d
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Aug-2018 18:38:57 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:30 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 19:29:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	97	954461	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	776799	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	92	416777	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	59	129168	10.0	10.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.345	0.012	99	149716	10.0	10.1	
$ 6 Toluene-d8 (Surr)	98	7.101	7.101	0.001	86	475254	10.0	10.2	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	89	173480	10.0	9.90	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	66	186223	10.0	10.1	
10 Chloromethane	50	1.823	1.812	0.011	81	134420	10.0	9.77	
12 Butadiene	54	1.906	1.906	0.000	90	141609	10.0	10.3	
11 Vinyl chloride	62	1.930	1.918	0.012	82	148037	10.0	10.4	
13 Bromomethane	94	2.227	2.227	0.000	90	111689	10.0	10.0	
14 Chloroethane	64	2.310	2.298	0.012	94	89838	10.0	10.2	
15 Dichlorofluoromethane	67	2.511	2.499	0.012	83	223205	10.0	10.2	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	86	244417	10.0	10.3	
17 Ethyl ether	59	2.808	2.808	0.000	90	88252	10.0	10.3	
18 Acrolein	56	2.926	2.926	0.000	96	100203	50.0	47.2	
21 1,1-Dichloroethene	61	3.045	3.045	0.000	90	177882	10.0	10.4	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	78	126531	10.0	10.3	
22 Acetone	43	3.069	3.069	0.000	71	73077	20.0	19.5	
23 Iodomethane	142	3.199	3.199	0.000	99	225726	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.270	3.258	0.012	98	351356	10.0	9.80	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	76	171118	10.0	10.1	
27 Methyl acetate	43	3.377	3.377	0.000	95	228841	20.0	20.6	
28 Methylene Chloride	49	3.484	3.495	-0.011	73	139613	10.0	10.3	
29 2-Methyl-2-propanol	59	3.579	3.567	0.012	89	135517	100.0	104.9	
30 Acrylonitrile	53	3.697	3.685	0.012	98	514757	100.0	107.3	
32 trans-1,2-Dichloroethene	61	3.733	3.721	0.012	68	167419	10.0	10.4	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	89	342568	10.0	10.3	
33 Hexane	57	3.982	3.982	0.000	93	174299	10.0	10.4	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	85	199597	10.0	10.3	
35 Vinyl acetate	43	4.148	4.148	0.000	97	231586	10.0	10.5	
40 cis-1,2-Dichloroethene	96	4.634	4.622	0.012	68	140685	10.0	10.2	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	61	116583	10.0	10.0	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	92	48290	20.0	21.4	
45 Chlorobromomethane	49	4.836	4.836	0.000	68	94139	10.0	10.1	
46 Tetrahydrofuran	42	4.883	4.883	0.000	84	114720	20.0	22.1	
47 Chloroform	83	4.907	4.907	0.000	71	224371	10.0	10.6	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	90	211997	10.0	10.6	
49 Cyclohexane	84	5.144	5.144	0.000	86	188221	10.0	10.3	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	92	174842	10.0	10.4	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	201366	10.0	10.5	
52 Isobutyl alcohol	41	5.298	5.298	0.000	68	127213	250.0	242.7	
53 Benzene	78	5.417	5.417	0.000	94	482300	10.0	10.6	
54 1,2-Dichloroethane	62	5.417	5.417	0.000	48	178638	10.0	10.4	
56 n-Heptane	57	5.642	5.642	0.000	64	123554	10.0	10.5	
58 Trichloroethene	130	5.986	5.986	0.000	92	156409	10.0	10.4	
60 Methylcyclohexane	83	6.176	6.176	0.000	87	225444	10.0	10.3	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	78	112735	10.0	10.7	
63 Dibromomethane	174	6.306	6.294	0.012	81	111478	10.0	10.3	
64 1,4-Dioxane	88	6.306	6.306	0.000	24	20257	200.0	177.6	
65 Dichlorobromomethane	83	6.436	6.436	0.000	93	172767	10.0	10.4	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	93	185460	20.0	22.0	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	93	192411	10.0	10.4	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	83	332777	20.0	21.8	
70 Toluene	91	7.172	7.172	0.000	95	544474	10.0	10.4	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	80	187797	10.0	10.0	
72 Ethyl methacrylate	69	7.433	7.433	0.000	88	177753	10.0	10.5	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	87	115489	10.0	10.5	
75 Tetrachloroethene	166	7.693	7.693	0.000	91	175104	10.0	10.5	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	194537	10.0	10.4	
77 2-Hexanone	43	7.765	7.765	0.000	79	267096	20.0	21.8	
79 Chlorodibromomethane	129	7.931	7.919	0.012	88	145120	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	97	132926	10.0	10.2	
82 Chlorobenzene	112	8.524	8.524	0.000	96	370702	10.0	10.3	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	88	135561	10.0	10.5	
84 Ethylbenzene	106	8.630	8.630	0.000	98	200390	10.0	10.7	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	238543	10.0	10.4	
86 o-Xylene	106	9.152	9.152	0.000	88	225509	10.0	10.4	
87 Styrene	104	9.164	9.164	0.000	93	391834	10.0	10.5	
88 Bromoform	173	9.354	9.354	0.000	98	117306	10.0	10.3	
89 Isopropylbenzene	105	9.520	9.520	0.000	96	613985	10.0	10.5	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	90	172140	10.0	10.7	
92 Bromobenzene	156	9.840	9.840	0.000	88	169316	10.0	10.6	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	71	66218	10.0	10.9	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	63	60466	10.0	10.6	
95 N-Propylbenzene	120	9.947	9.947	0.000	90	171938	10.0	10.7	
96 2-Chlorotoluene	126	10.042	10.041	0.001	97	147510	10.0	10.8	
97 1,3,5-Trimethylbenzene	105	10.125	10.124	0.000	93	499875	10.0	10.8	
98 4-Chlorotoluene	126	10.148	10.148	0.000	98	155656	10.0	10.6	
99 tert-Butylbenzene	119	10.468	10.468	0.000	78	474813	10.0	10.8	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	72	495166	10.0	10.5	
102 sec-Butylbenzene	105	10.694	10.694	0.000	94	624437	10.0	10.5	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	83	299776	10.0	10.2	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	90	543873	10.0	10.5	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	90	308743	10.0	10.2	
108 n-Butylbenzene	91	11.287	11.287	0.000	96	439518	10.0	10.3	
109 1,2-Dichlorobenzene	146	11.299	11.298	0.001	97	273092	10.0	10.2	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	89	50642	10.0	9.92	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	93	168774	10.0	9.47	
113 Hexachlorobutadiene	225	13.208	13.208	0.000	90	87534	10.0	9.56	
114 Naphthalene	128	13.279	13.279	0.000	97	469280	10.0	9.53	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	95	153843	10.0	9.62	
S 127 Trihalomethanes, Total	1				0		40.0	41.7	
S 164 Total BTEX	1				0		50.0	52.5	
S 124 1,2-Dichloroethene, Total	96				0			20.6	
S 125 1,3-Dichloropropene, Total	75				0			20.5	
S 126 Xylenes, Total	106				0		20.0	20.8	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	8.00	Units: uL
vmarolistdw_00260	Amount Added:	8.00	Units: uL
vmrprimw_00297	Amount Added:	8.00	Units: uL
vm50ss_00333	Amount Added:	8.00	Units: uL

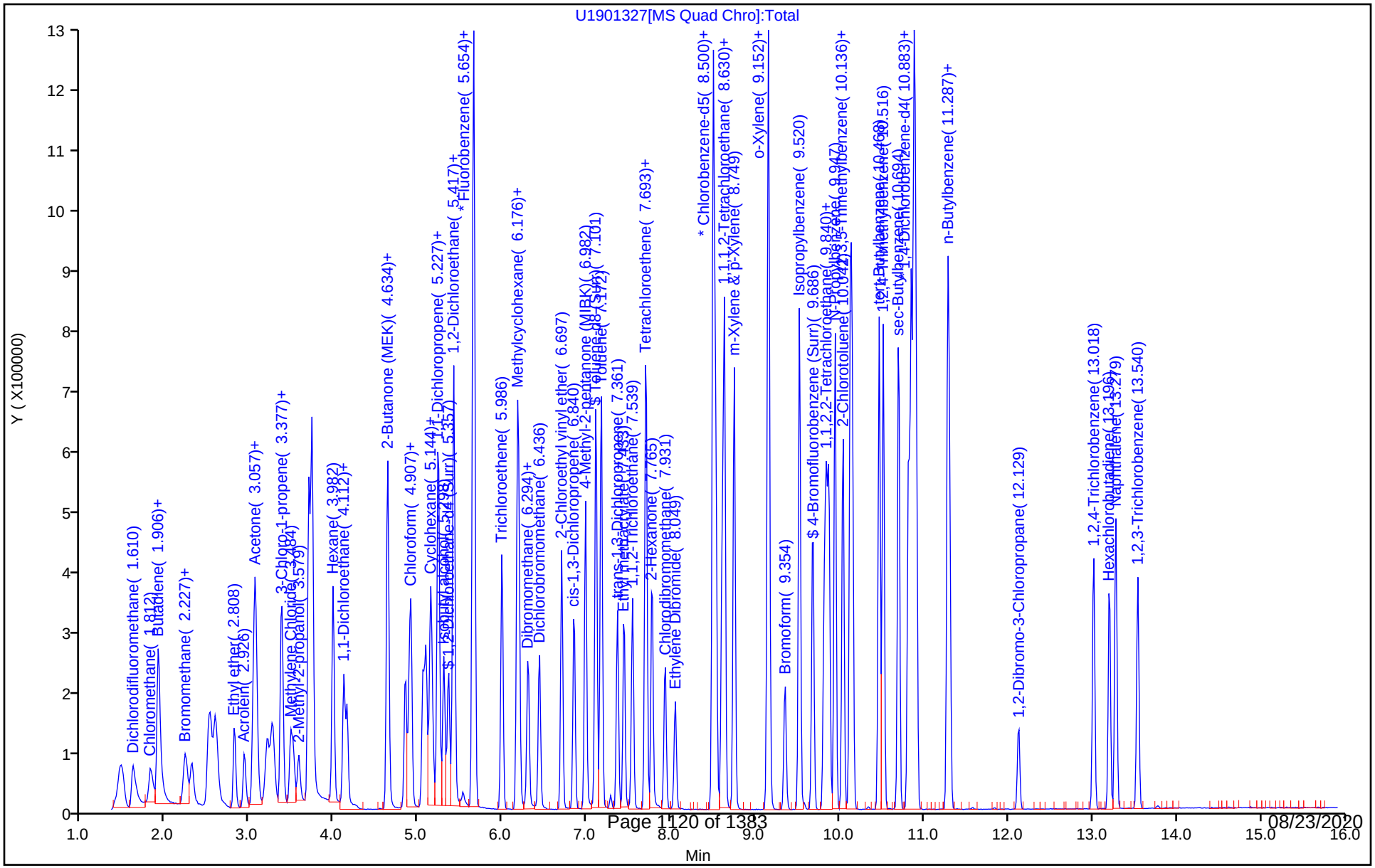
Report Date: 27-Aug-2018 21:28:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901327.d

Injection Date:	27-Aug-2018 18:38:57	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L3			Worklist Smp#:	11
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901328.d
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Aug-2018 19:01:13 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:42 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 19:32:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.653	5.654	-0.001	99	950066	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	741822	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	93	413134	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	60	13395	1.00	1.05	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.345	0.000	98	16187	1.00	1.10	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	0.000	84	44577	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	85	17494	1.00	1.05	
9 Dichlorodifluoromethane	85	1.598	1.610	-0.012	61	18328	1.00	1.00	
10 Chloromethane	50	1.811	1.812	-0.001	83	12972	1.00	0.9471	
12 Butadiene	54	1.894	1.906	-0.012	89	14115	1.00	1.03	
11 Vinyl chloride	62	1.918	1.918	0.000	47	14250	1.00	1.01	
13 Bromomethane	94	2.238	2.227	0.011	86	11360	1.00	1.02	
14 Chloroethane	64	2.297	2.298	-0.001	81	8387	1.00	0.9552	
15 Dichlorofluoromethane	67	2.511	2.499	0.012	76	21694	1.00	1.00	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	84	23241	1.00	0.9817	
17 Ethyl ether	59	2.807	2.808	-0.001	83	9015	1.00	1.05	
18 Acrolein	56	2.926	2.926	0.000	86	10600	5.00	5.02	
21 1,1-Dichloroethene	61	3.045	3.045	0.000	86	16498	1.00	0.9676	
20 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.057	-0.012	67	11240	1.00	0.9217	
22 Acetone	43	3.068	3.069	-0.001	90	8941	2.00	2.40	
23 Iodomethane	142	3.187	3.199	-0.012	96	22471	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	97	39223	1.00	1.10	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	76	18227	1.00	1.08	
27 Methyl acetate	43	3.377	3.377	0.000	96	22480	2.00	2.03	
28 Methylene Chloride	49	3.483	3.495	-0.012	78	15126	1.00	1.12	
29 2-Methyl-2-propanol	59	3.566	3.567	-0.001	88	13140	10.0	10.2	
30 Acrylonitrile	53	3.697	3.685	0.012	99	49680	10.0	10.4	
32 trans-1,2-Dichloroethene	61	3.732	3.721	0.011	72	16818	1.00	1.05	
31 Methyl tert-butyl ether	73	3.732	3.733	-0.001	89	33109	1.00	1.00	
33 Hexane	57	3.981	3.982	-0.001	93	15276	1.00	0.9125	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	76	19673	1.00	1.02	
35 Vinyl acetate	43	4.147	4.148	-0.001	96	21765	1.00	0.9877	
40 cis-1,2-Dichloroethene	96	4.622	4.622	0.000	70	14212	1.00	1.03	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	91	4567	2.00	2.04	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	58	11860	1.00	1.02	
45 Chlorobromomethane	49	4.835	4.836	-0.001	64	10266	1.00	1.11	
46 Tetrahydrofuran	42	4.883	4.883	0.000	85	20056	2.00	1.81	
47 Chloroform	83	4.906	4.907	-0.001	67	21044	1.00	1.00	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	84	19503	1.00	0.9837	
49 Cyclohexane	84	5.144	5.144	0.000	85	16696	1.00	0.9202	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	88	16667	1.00	1.00	
51 Carbon tetrachloride	117	5.238	5.239	-0.001	77	17959	1.00	0.9397	
52 Isobutyl alcohol	41	5.298	5.298	0.000	78	14010	25.0	26.9	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	52	18266	1.00	1.07	
53 Benzene	78	5.416	5.417	-0.001	95	45349	1.00	1.00	
56 n-Heptane	57	5.653	5.642	0.011	38	39021	1.00	0.9553	
58 Trichloroethene	130	5.985	5.986	-0.001	90	14636	1.00	0.9750	
60 Methylcyclohexane	83	6.175	6.176	-0.001	87	20268	1.00	0.9296	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	78	10172	1.00	0.9700	
63 Dibromomethane	174	6.294	6.294	0.000	83	11437	1.00	1.06	
64 1,4-Dioxane	88	6.306	6.306	0.000	1	1560	20.0	13.7	
65 Dichlorobromomethane	83	6.424	6.436	-0.012	86	17242	1.00	1.04	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	90	15714	2.00	1.87	
68 cis-1,3-Dichloropropene	75	6.839	6.840	-0.001	72	18371	1.00	1.00	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	81	29549	2.00	1.94	
70 Toluene	91	7.171	7.172	-0.001	86	50838	1.00	1.01	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	79	18668	1.00	1.04	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	70	14839	1.00	0.9209	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	87	10462	1.00	0.99	
75 Tetrachloroethene	166	7.693	7.693	0.000	95	15556	1.00	0.9725	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	79	17554	1.00	0.9855	
77 2-Hexanone	43	7.764	7.765	-0.001	94	22402	2.00	1.92	
79 Chlorodibromomethane	129	7.930	7.919	0.011	80	12969	1.00	0.9758	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	85	12317	1.00	0.99	
82 Chlorobenzene	112	8.523	8.524	-0.001	60	36469	1.00	1.06	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	75	12290	1.00	0.99	
84 Ethylbenzene	106	8.630	8.630	0.000	97	17209	1.00	0.9594	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	20530	1.00	0.9397	
86 o-Xylene	106	9.152	9.152	0.000	87	20689	1.00	1.00	
87 Styrene	104	9.164	9.164	0.000	92	33591	1.00	0.9446	
88 Bromoform	173	9.353	9.354	-0.001	89	10783	1.00	0.99	
89 Isopropylbenzene	105	9.519	9.520	-0.001	93	55346	1.00	0.99	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	75	16261	1.00	1.02	
92 Bromobenzene	156	9.840	9.840	0.000	89	16361	1.00	1.03	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	66	5997	1.00	0.99	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	38	5707	1.00	1.01	
95 N-Propylbenzene	120	9.946	9.947	-0.001	95	15476	1.00	0.9694	
96 2-Chlorotoluene	126	10.041	10.041	0.000	92	12831	1.00	0.9496	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	91	43584	1.00	0.9481	
98 4-Chlorotoluene	126	10.148	10.148	0.000	97	14345	1.00	0.9819	
99 tert-Butylbenzene	119	10.468	10.468	0.000	73	41850	1.00	0.9590	
101 1,2,4-Trimethylbenzene	105	10.515	10.516	-0.001	67	46663	1.00	1.00	
102 sec-Butylbenzene	105	10.693	10.694	-0.001	92	55760	1.00	0.9489	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	11	31057	1.00	1.06	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	77	49391	1.00	0.9596	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	49	32379	1.00	1.07	
108 n-Butylbenzene	91	11.286	11.287	-0.001	95	41792	1.00	0.9871	
109 1,2-Dichlorobenzene	146	11.310	11.298	0.012	93	28272	1.00	1.07	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	57	4583	1.00	0.9054	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	83	19612	1.00	1.11	
113 Hexachlorobutadiene	225	13.207	13.208	-0.001	72	10037	1.00	1.11	
114 Naphthalene	128	13.279	13.279	0.000	94	52154	1.00	1.07	
115 1,2,3-Trichlorobenzene	180	13.539	13.540	-0.001	86	17097	1.00	1.08	
S 164 Total BTEX	1				0		5.00	4.91	
S 127 Trihalomethanes, Total	1				0		4.00	4.01	
S 124 1,2-Dichloroethene, Total	96				0			2.08	
S 125 1,3-Dichloropropene, Total	75				0			2.05	
S 126 Xylenes, Total	106				0		2.00	1.94	

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	0.80	Units: uL
vmarolistdw_00260	Amount Added:	0.80	Units: uL
vmrprimw_00297	Amount Added:	0.80	Units: uL
vm50ss_00333	Amount Added:	0.80	Units: uL

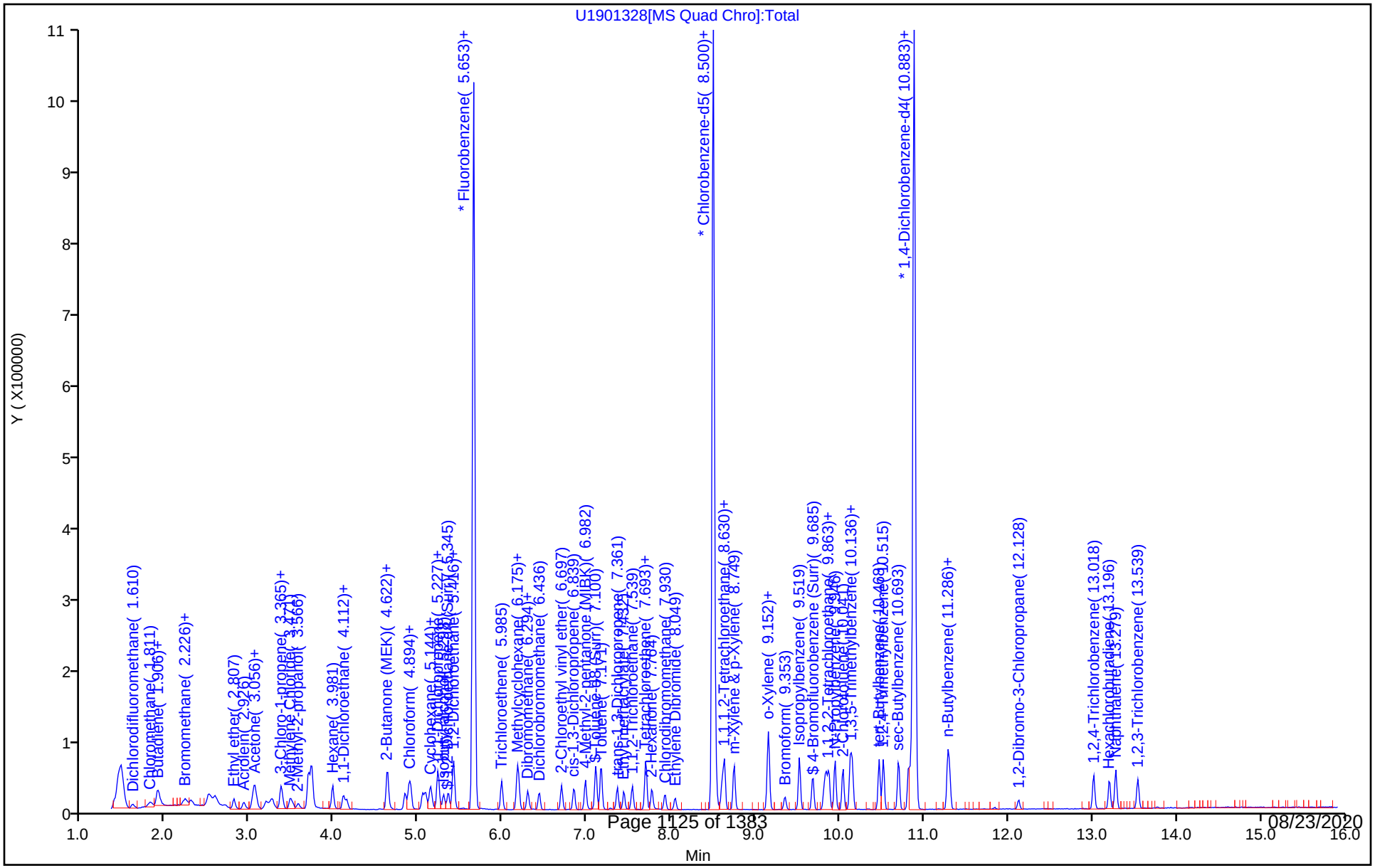
Report Date: 27-Aug-2018 21:28:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901328.d

Injection Date:	27-Aug-2018 19:01:13	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L2			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Aug-2018 19:23:28 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:54 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 19:52:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	938021	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	738667	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	93	405345	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	56	6919	0.5000	0.5480	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.345	0.012	94	8242	0.5000	0.5683	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	0.000	74	23636	0.5000	0.5336	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	82	9778	0.5000	0.5866	
9 Dichlorodifluoromethane	85	1.622	1.610	0.012	56	7625	0.5000	0.4223	
10 Chloromethane	50	1.812	1.812	0.000	70	8152	0.5000	0.6028	
12 Butadiene	54	1.906	1.906	0.000	92	6713	0.5000	0.4958	
11 Vinyl chloride	62	1.942	1.918	0.024	39	6564	0.5000	0.4697	
13 Bromomethane	94	2.227	2.227	0.000	83	5934	0.5000	0.5419	
14 Chloroethane	64	2.310	2.298	0.012	73	4812	0.5000	0.5551	
15 Dichlorofluoromethane	67	2.511	2.499	0.012	55	11593	0.5000	0.5395	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	76	11587	0.5000	0.4957	
17 Ethyl ether	59	2.808	2.808	0.000	84	4060	0.5000	0.4810	
18 Acrolein	56	2.938	2.926	0.012	73	5804	2.50	2.78	
21 1,1-Dichloroethene	61	3.045	3.045	0.000	72	8152	0.5000	0.4842	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	55	5847	0.5000	0.4856	
22 Acetone	43		3.069				ND	ND	U
23 Iodomethane	142	3.199	3.199	0.000	93	11424	0.5000	0.5233	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	3.258	3.258	0.000	95	20511	0.5000	0.5820	
26 3-Chloro-1-propene	41	3.365	3.365	0.000	70	8759	0.5000	0.5274	
27 Methyl acetate	43	3.389	3.377	0.012	94	12374	1.00	1.13	
28 Methylene Chloride	49		3.495				ND	ND	U
29 2-Methyl-2-propanol	59	3.578	3.567	0.011	76	7089	5.00	5.58	
30 Acrylonitrile	53	3.697	3.685	0.012	98	23600	5.00	5.00	
32 trans-1,2-Dichloroethene	61	3.733	3.721	0.012	68	8368	0.5000	0.5268	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	83	15146	0.5000	0.4655	
33 Hexane	57	3.982	3.982	0.000	81	7709	0.5000	0.4664	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	57	9092	0.5000	0.4789	
35 Vinyl acetate	43	4.148	4.148	0.000	96	10910	0.5000	0.5015	
40 cis-1,2-Dichloroethene	96	4.634	4.622	0.012	63	7168	0.5000	0.5287	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	48	5791	0.5000	0.5065	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	82	2283	1.00	1.03	
45 Chlorobromomethane	49	4.847	4.836	0.011	57	5503	0.5000	0.6031	
46 Tetrahydrofuran	42		4.883				ND	ND	U
47 Chloroform	83	4.907	4.907	0.000	71	10169	0.5000	0.4891	
48 1,1,1-Trichloroethane	97	5.085	5.085	0.000	78	8767	0.5000	0.4479	
49 Cyclohexane	84	5.144	5.144	0.000	85	8206	0.5000	0.4581	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	80	7998	0.5000	0.4846	
51 Carbon tetrachloride	117	5.239	5.239	0.000	77	8954	0.5000	0.4745	
52 Isobutyl alcohol	41	5.298	5.298	0.000	52	7140	12.5	13.9	
53 Benzene	78	5.417	5.417	0.000	95	21738	0.5000	0.4870	
54 1,2-Dichloroethane	62	5.428	5.417	0.011	58	8896	0.5000	0.5268	
56 n-Heptane	57		5.642				ND	ND	U
58 Trichloroethene	130	5.986	5.986	0.000	77	7819	0.5000	0.5276	
60 Methylcyclohexane	83	6.176	6.176	0.000	85	10042	0.5000	0.4665	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	64	5092	0.5000	0.4918	
63 Dibromomethane	174	6.306	6.294	0.012	66	5652	0.5000	0.5307	
64 1,4-Dioxane	88		6.306				ND	ND	U
65 Dichlorobromomethane	83	6.436	6.436	0.000	75	7972	0.5000	0.4885	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	83	7473	1.00	0.9000	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	60	8778	0.5000	0.4843	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	90	14774	1.00	0.9834	
70 Toluene	91	7.172	7.172	0.000	94	25413	0.5000	0.5091	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	76	9232	0.5000	0.5188	
72 Ethyl methacrylate	69	7.433	7.433	0.000	70	7062	0.5000	0.4401	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	79	5186	0.5000	0.4942	
75 Tetrachloroethene	166	7.693	7.693	0.000	86	7818	0.5000	0.4908	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	72	9211	0.5000	0.5193	
77 2-Hexanone	43	7.765	7.765	0.000	88	10272	1.00	0.8832	
79 Chlorodibromomethane	129	7.931	7.919	0.012	54	6108	0.5000	0.4615	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	8.049	8.049	0.000	74	6962	0.5000	0.5633	
82 Chlorobenzene	112	8.524	8.524	0.000	45	17303	0.5000	0.5063	
83 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	55	5956	0.5000	0.4834	
84 Ethylbenzene	106	8.630	8.630	0.000	94	8431	0.5000	0.4721	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	96	10542	0.5000	0.4846	
86 o-Xylene	106	9.140	9.152	-0.012	88	9580	0.5000	0.4635	
87 Styrene	104	9.164	9.164	0.000	83	16463	0.5000	0.4649	
88 Bromoform	173	9.354	9.354	0.000	77	5340	0.5000	0.4930	
89 Isopropylbenzene	105	9.520	9.520	0.000	90	25288	0.5000	0.4556	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	62	7218	0.5000	0.4621	
92 Bromobenzene	156	9.840	9.840	0.000	88	7663	0.5000	0.4917	
93 1,2,3-Trichloropropane	110	9.864	9.864	0.000	66	2842	0.5000	0.4801	
94 trans-1,4-Dichloro-2-buten	53		9.875				ND	ND	U
95 N-Propylbenzene	120	9.947	9.947	0.000	91	7103	0.5000	0.4535	
96 2-Chlorotoluene	126	10.041	10.041	0.000	82	6213	0.5000	0.4687	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	91	21381	0.5000	0.4740	
98 4-Chlorotoluene	126	10.148	10.148	0.000	91	7405	0.5000	0.5166	
99 tert-Butylbenzene	119	10.468	10.468	0.000	70	19348	0.5000	0.4519	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	63	21277	0.5000	0.4653	
102 sec-Butylbenzene	105	10.694	10.694	0.000	88	26267	0.5000	0.4556	
103 1,3-Dichlorobenzene	146	10.824	10.812	0.012	1	14989	0.5000	0.5237	a
104 4-Isopropyltoluene	119	10.848	10.848	0.000	68	23262	0.5000	0.4606	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	39	16269	0.5000	0.5502	
108 n-Butylbenzene	91	11.287	11.287	0.000	91	19197	0.5000	0.4622	
109 1,2-Dichlorobenzene	146	11.298	11.298	0.000	87	13617	0.5000	0.5240	
110 1,2-Dibromo-3-Chloropropan	157	12.129	12.129	0.000	31	2665	0.5000	0.5366	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	63	9535	0.5000	0.5502	
113 Hexachlorobutadiene	225	13.208	13.208	0.000	55	4814	0.5000	0.5408	
114 Naphthalene	128		13.279				ND	ND	U
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	72	7998	0.5000	0.5140	
S 127 Trihalomethanes, Total	1				0		2.00	1.93	
S 164 Total BTEX	1				0		2.50	2.42	
S 124 1,2-Dichloroethene, Total	96				0			1.06	
S 125 1,3-Dichloropropene, Total	75				0			1.00	
S 126 Xylenes, Total	106				0		1.00	0.9480	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

vm50is_stk_A_00001	Amount Added:	2.00	Units: uL
vmrgas_00259	Amount Added:	0.40	Units: uL
vmarolistdw_00260	Amount Added:	0.40	Units: uL
vmrprimw_00297	Amount Added:	0.40	Units: uL
vm50ss_00333	Amount Added:	0.40	Units: uL

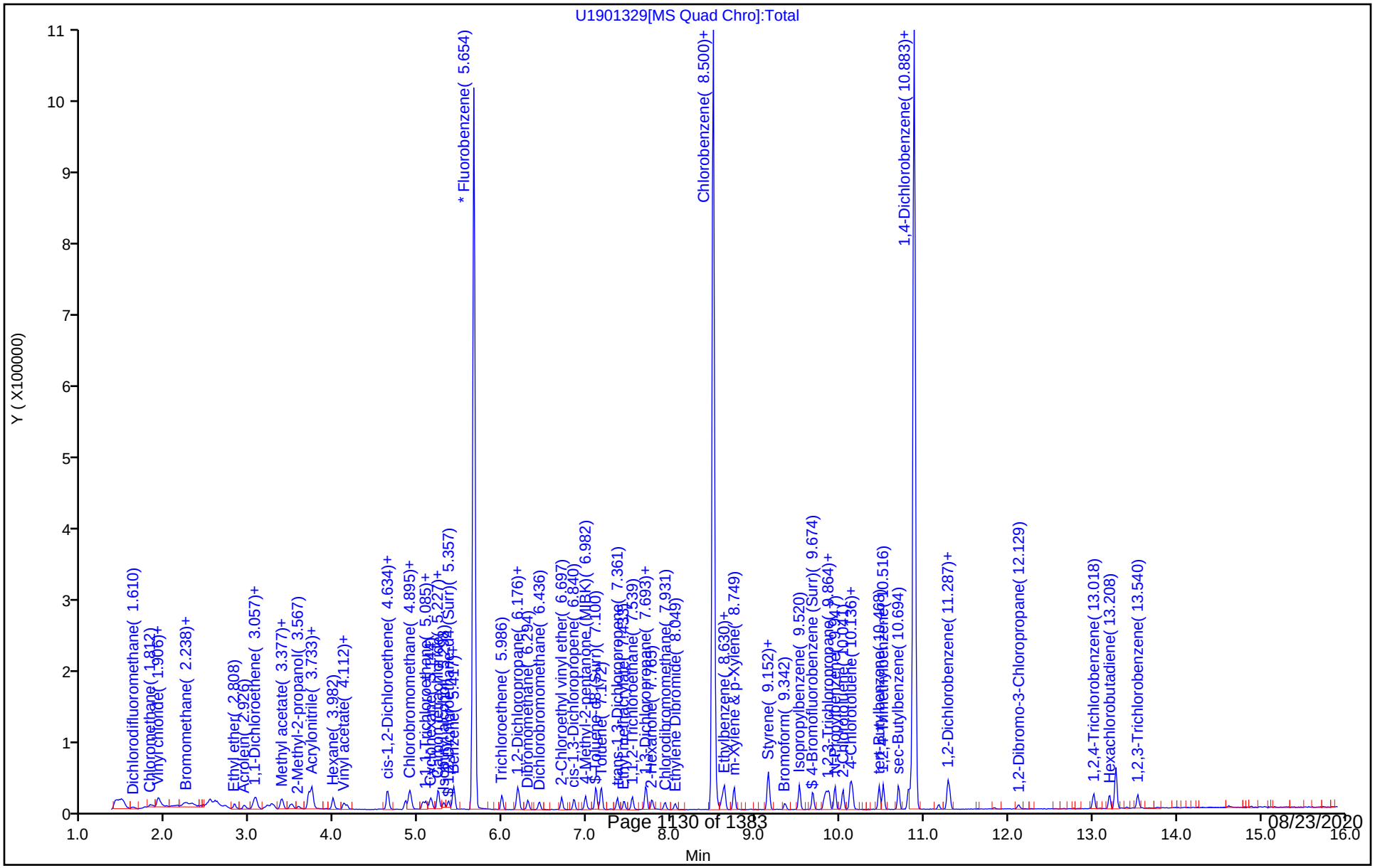
Report Date: 27-Aug-2018 21:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date:	27-Aug-2018 19:23:28	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	std8260 L1			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

TestAmerica Canton

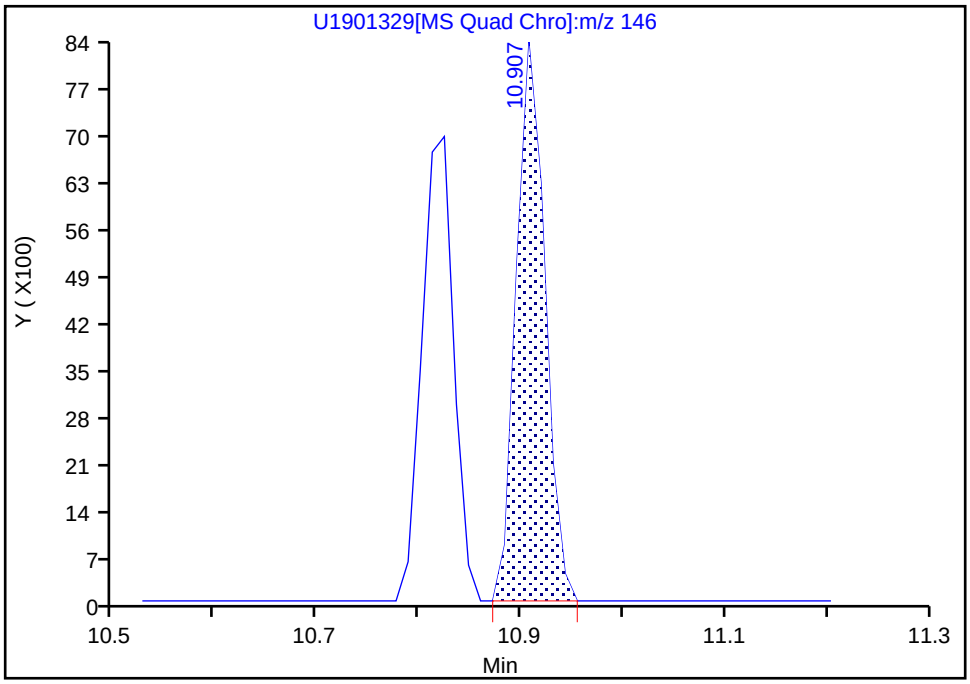
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d				
Injection Date:	27-Aug-2018 19:23:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

103 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

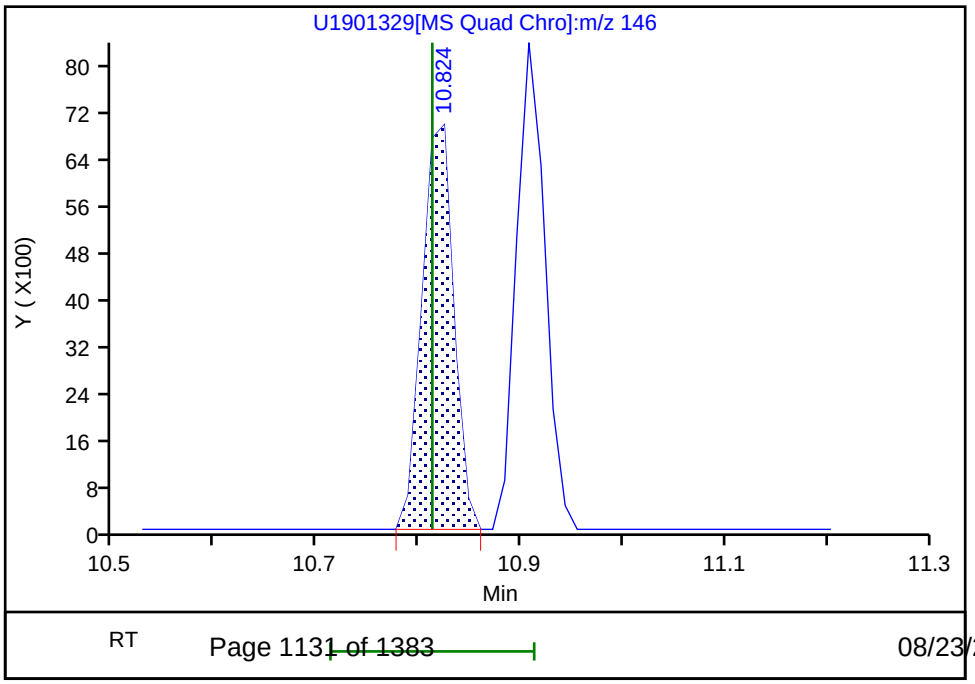
Processing Integration Results

RT: 10.91
Area: 16269
Amount: 0.561209
Amount Units: ug/l



Manual Integration Results

RT: 10.82
Area: 14989
Amount: 0.523661
Amount Units: ug/l



Reviewer: laveyt, 27-Aug-2018 19:47:35

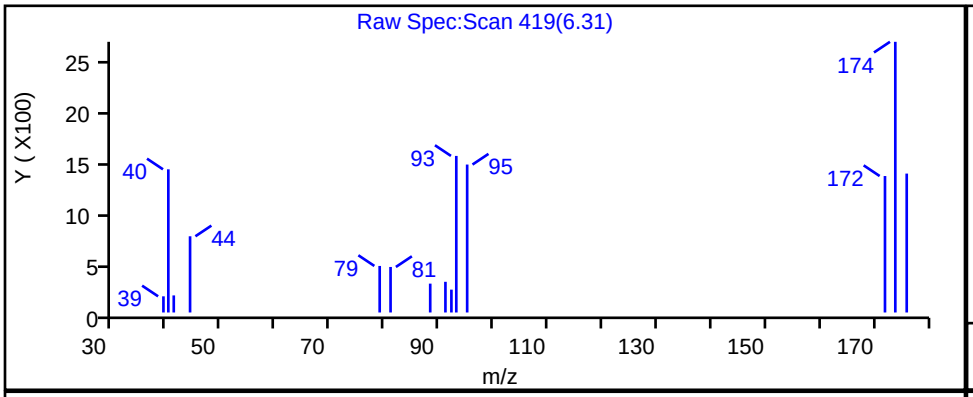
User Disabled Compound Report

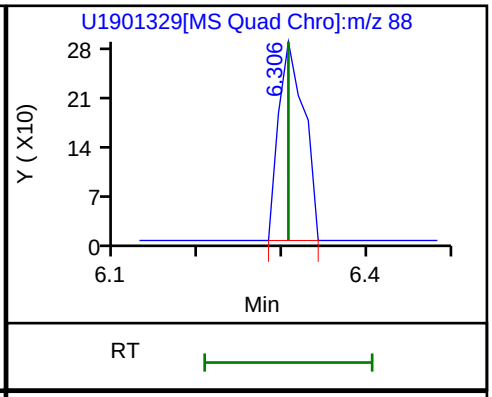
TestAmerica Canton

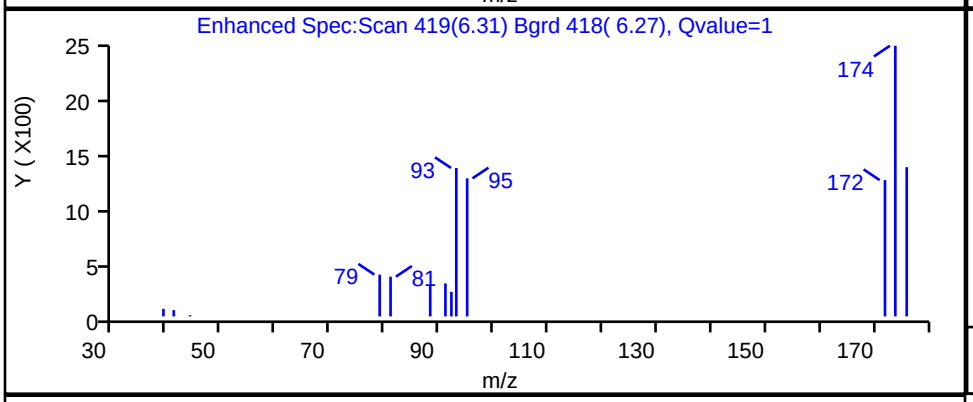
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d				
Injection Date:	27-Aug-2018 19:23:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

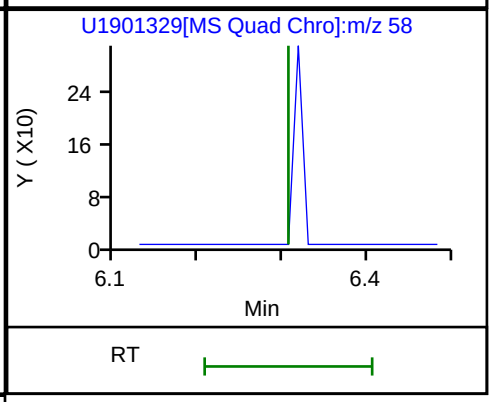
64 1,4-Dioxane, CAS: 123-91-1

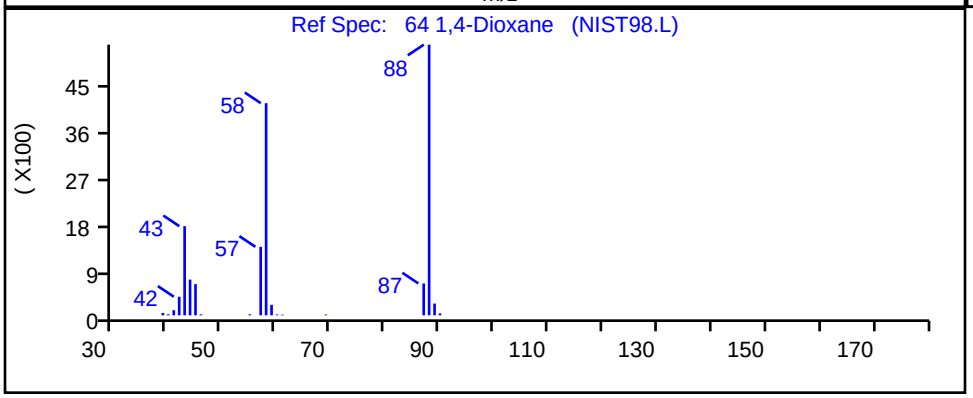
Processing Results











RT	Mass	Response	Amount
6.31	88.00	601	11.604682
6.31	58.00	0	

Reviewer: laveyt, 27-Aug-2018 19:49:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

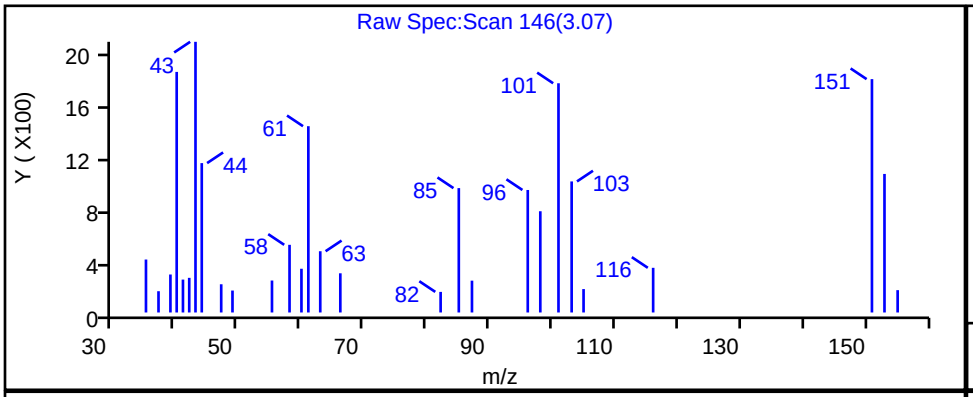
Injection Vol: 5.0 mL Dil. Factor: 1.0000

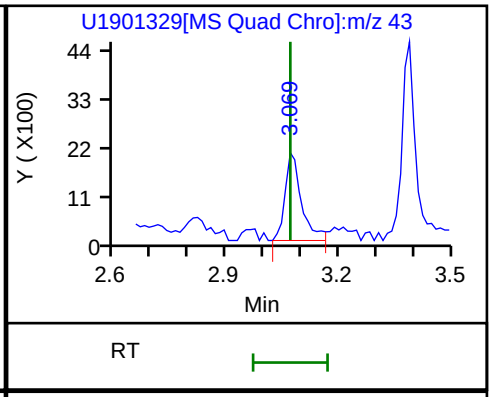
Method: 8260_19 Limit Group: MSV 8260C ICAL

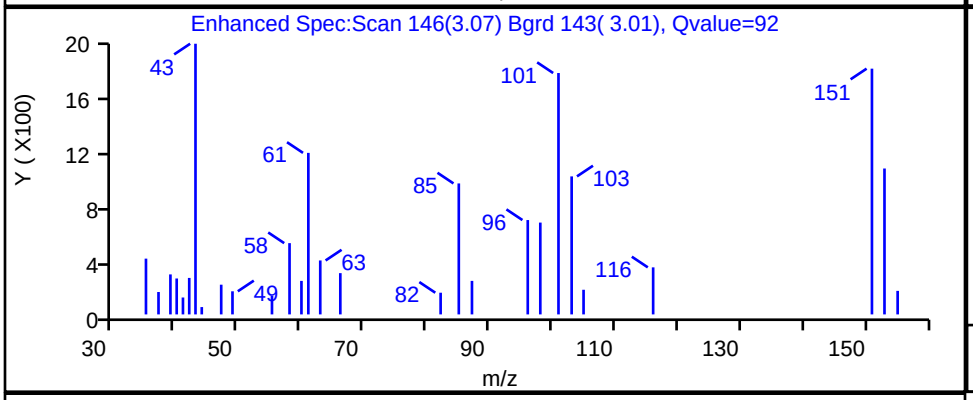
Column: DB-624 (0.18 mm) Detector MS SCAN

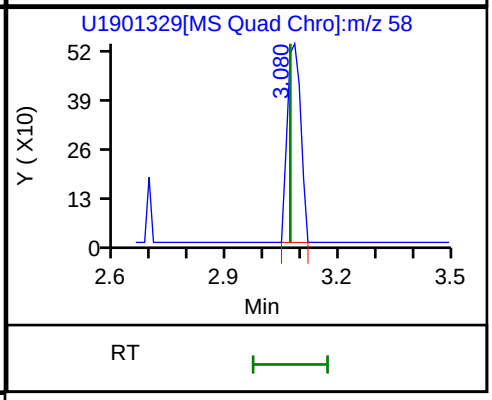
22 Acetone, CAS: 67-64-1

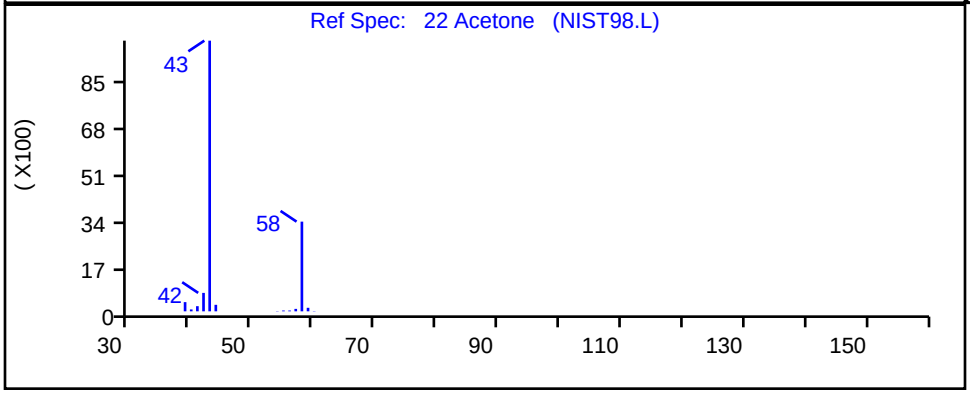
Processing Results











RT	Mass	Response	Amount
3.07	43.00	6224	1.077444
3.08	58.00	1333	

Reviewer: laveyt, 27-Aug-2018 19:48:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

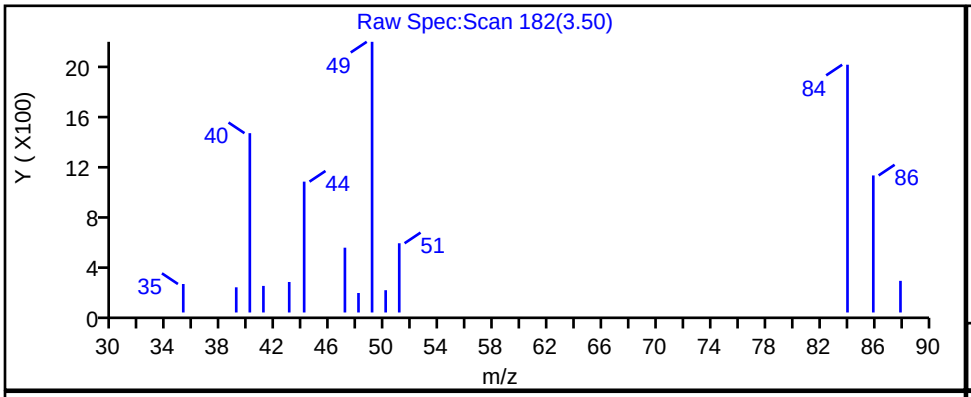
User Disabled Compound Report

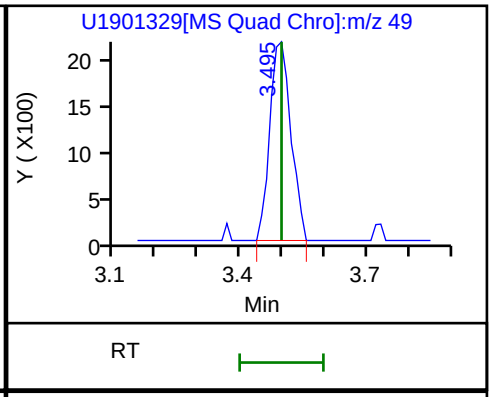
TestAmerica Canton

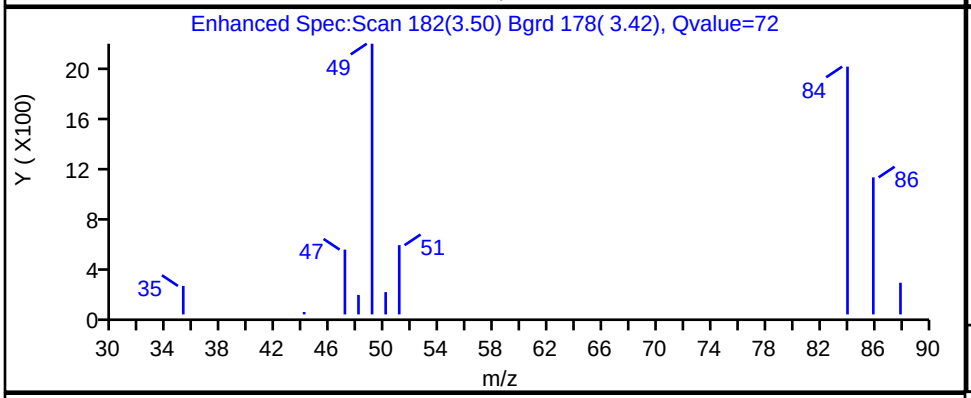
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d				
Injection Date:	27-Aug-2018 19:23:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

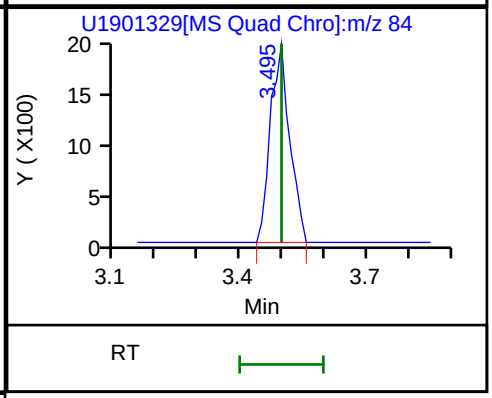
28 Methylene Chloride, CAS: 75-09-2

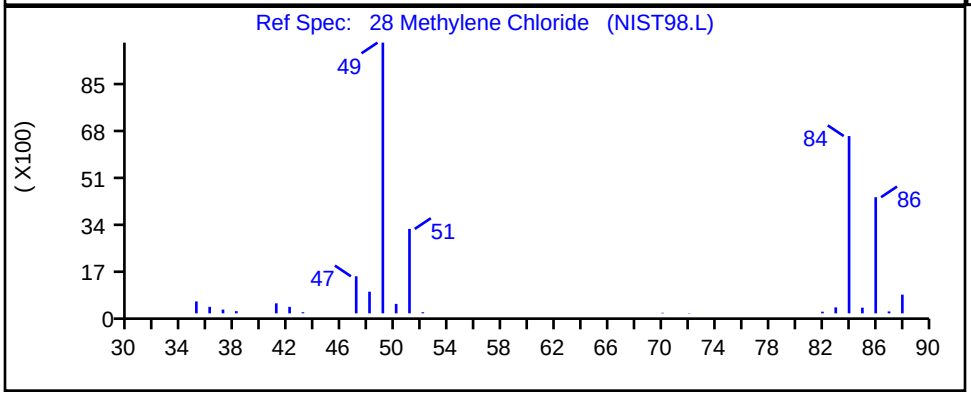
Processing Results











RT	Mass	Response	Amount
3.50	49.00	7484	0.551047
3.50	84.00	6258	

Reviewer: laveyt, 27-Aug-2018 19:48:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

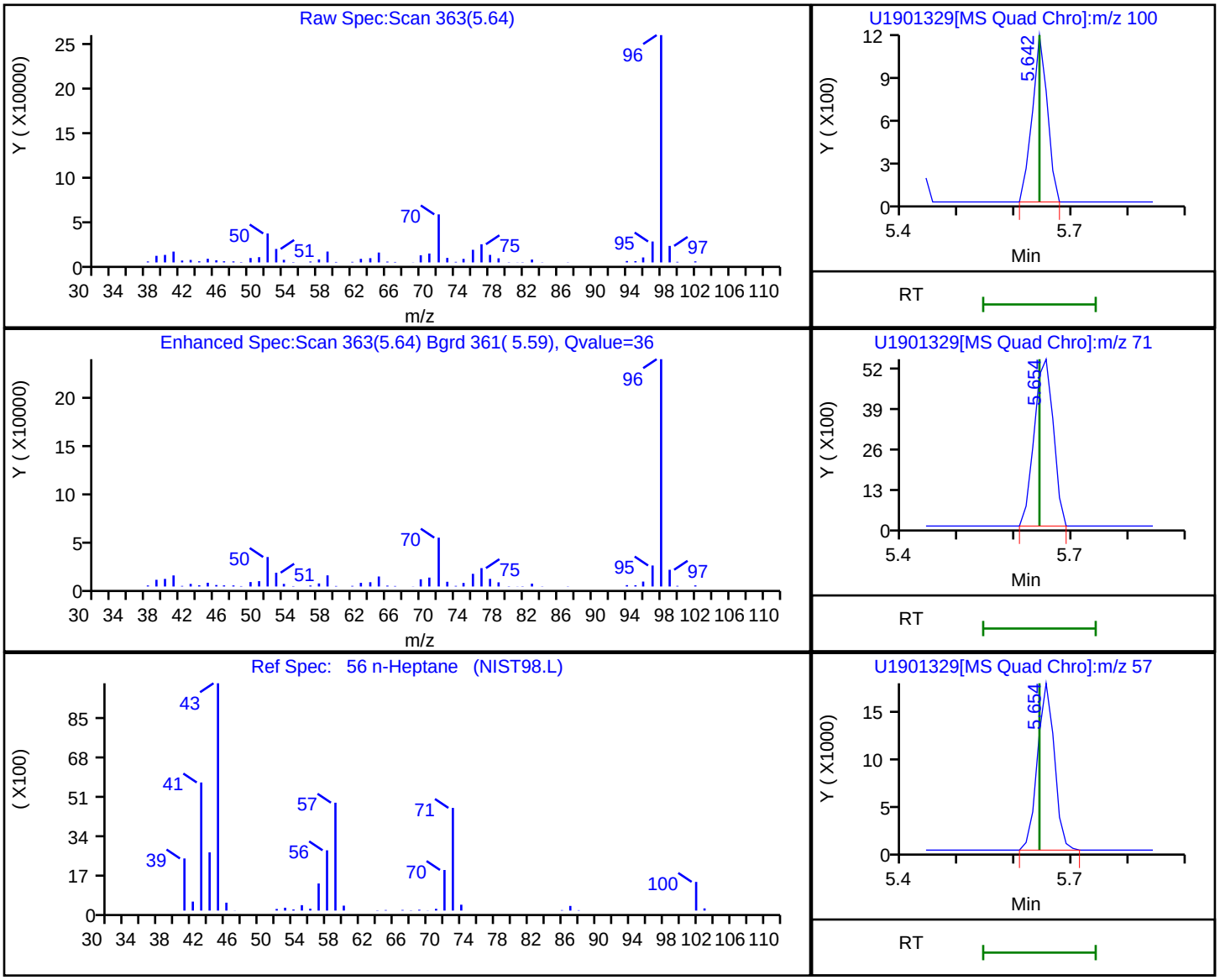
Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

56 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
5.64	100.00	2131	
5.65	71.00	12900	
5.65	57.00	35542	0.539390

Reviewer: laveyt, 27-Aug-2018 19:48:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

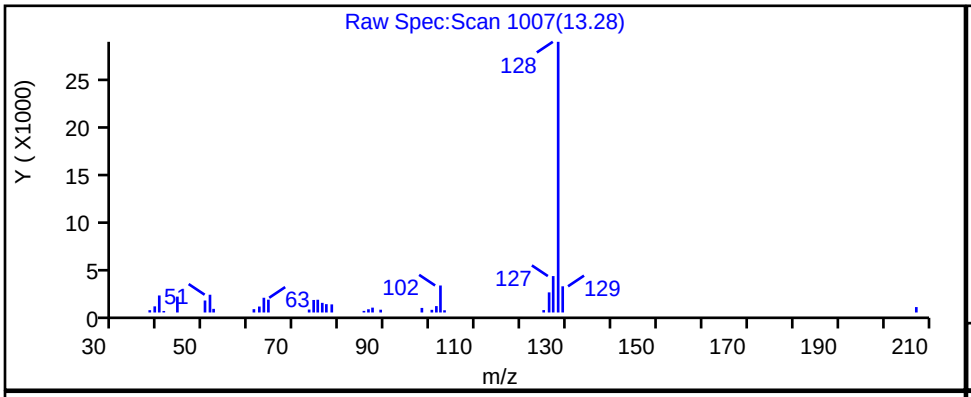
Injection Vol: 5.0 mL Dil. Factor: 1.0000

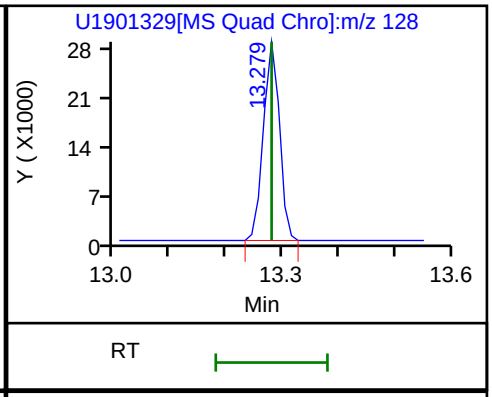
Method: 8260_19 Limit Group: MSV 8260C ICAL

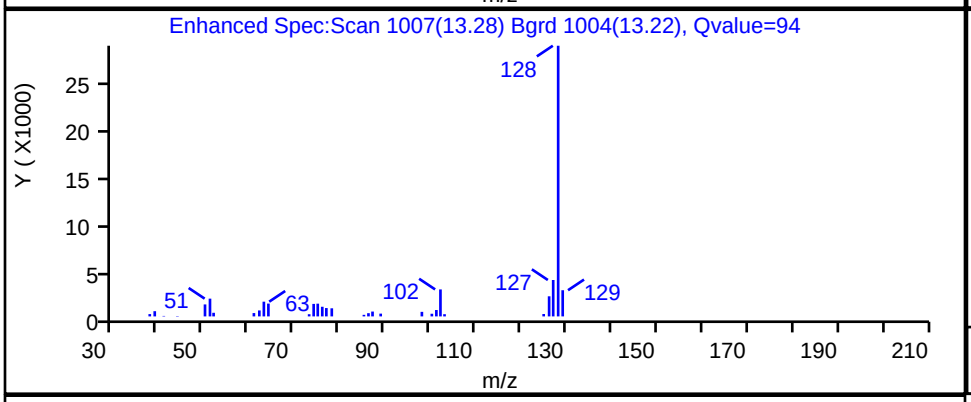
Column: DB-624 (0.18 mm) Detector MS SCAN

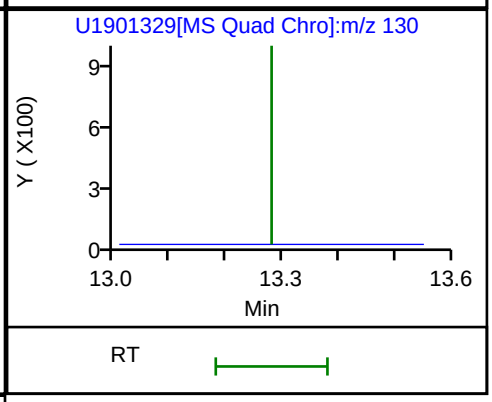
114 Naphthalene, CAS: 91-20-3

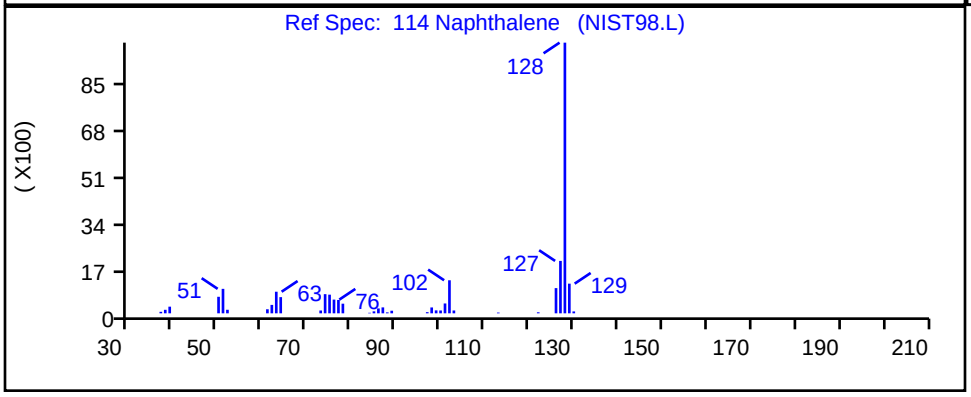
Processing Results











RT	Mass	Response	Amount
13.28	128.00	56279	0.769368
13.28	130.00	0	

Reviewer: laveyt, 27-Aug-2018 20:00:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

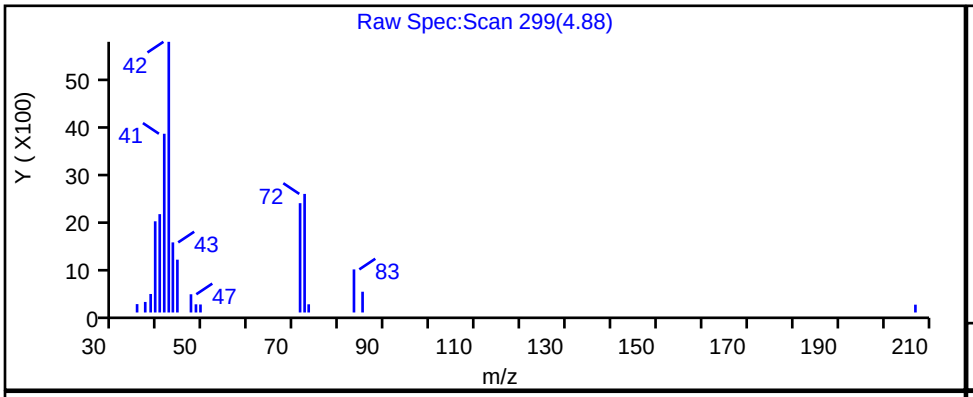
User Disabled Compound Report

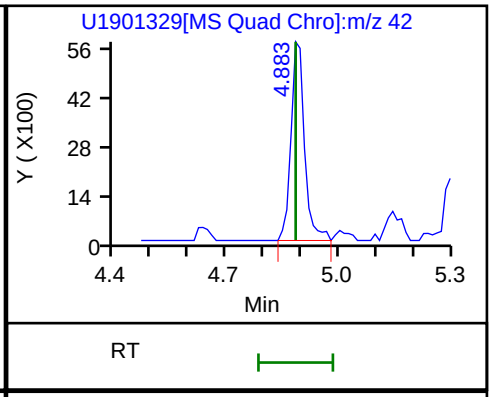
TestAmerica Canton

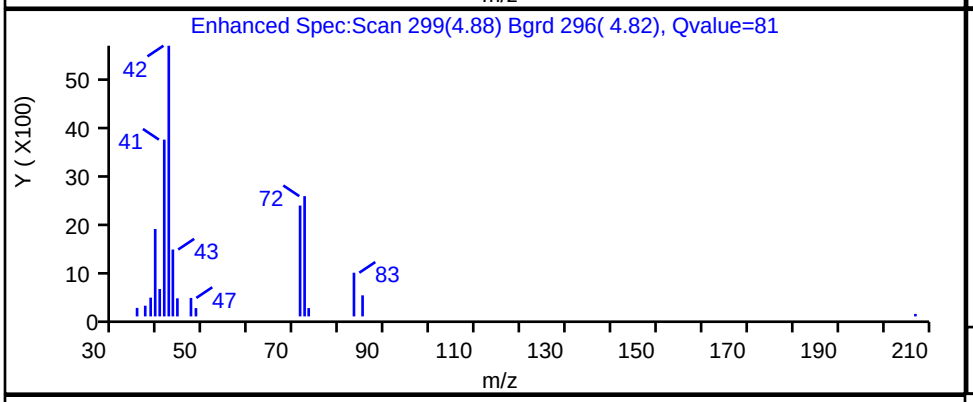
Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d				
Injection Date:	27-Aug-2018 19:23:28	Instrument ID:	A3UX19		
Lims ID:	std8260 L1				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

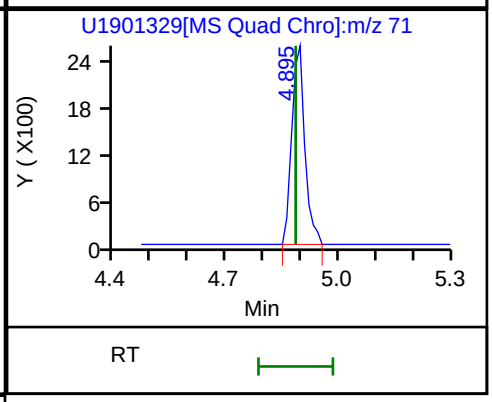
46 Tetrahydrofuran, CAS: 109-99-9

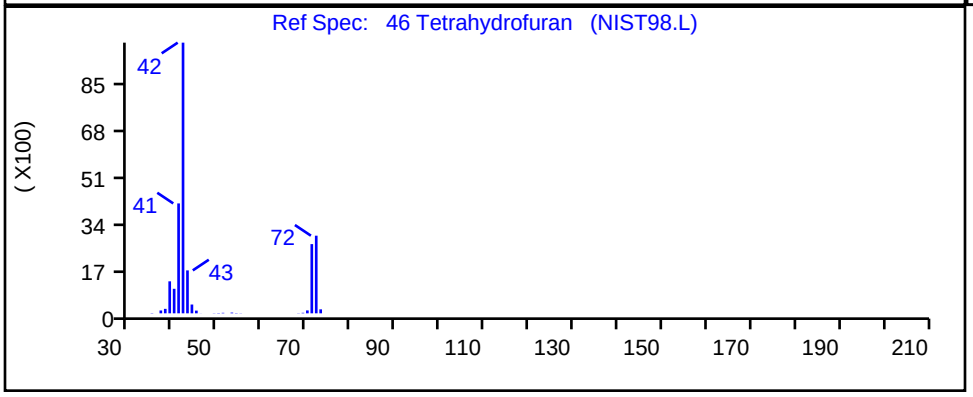
Processing Results











RT	Mass	Response	Amount
4.88	42.00	14557	0.882444
4.89	71.00	6288	

Reviewer: laveyt, 27-Aug-2018 19:48:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

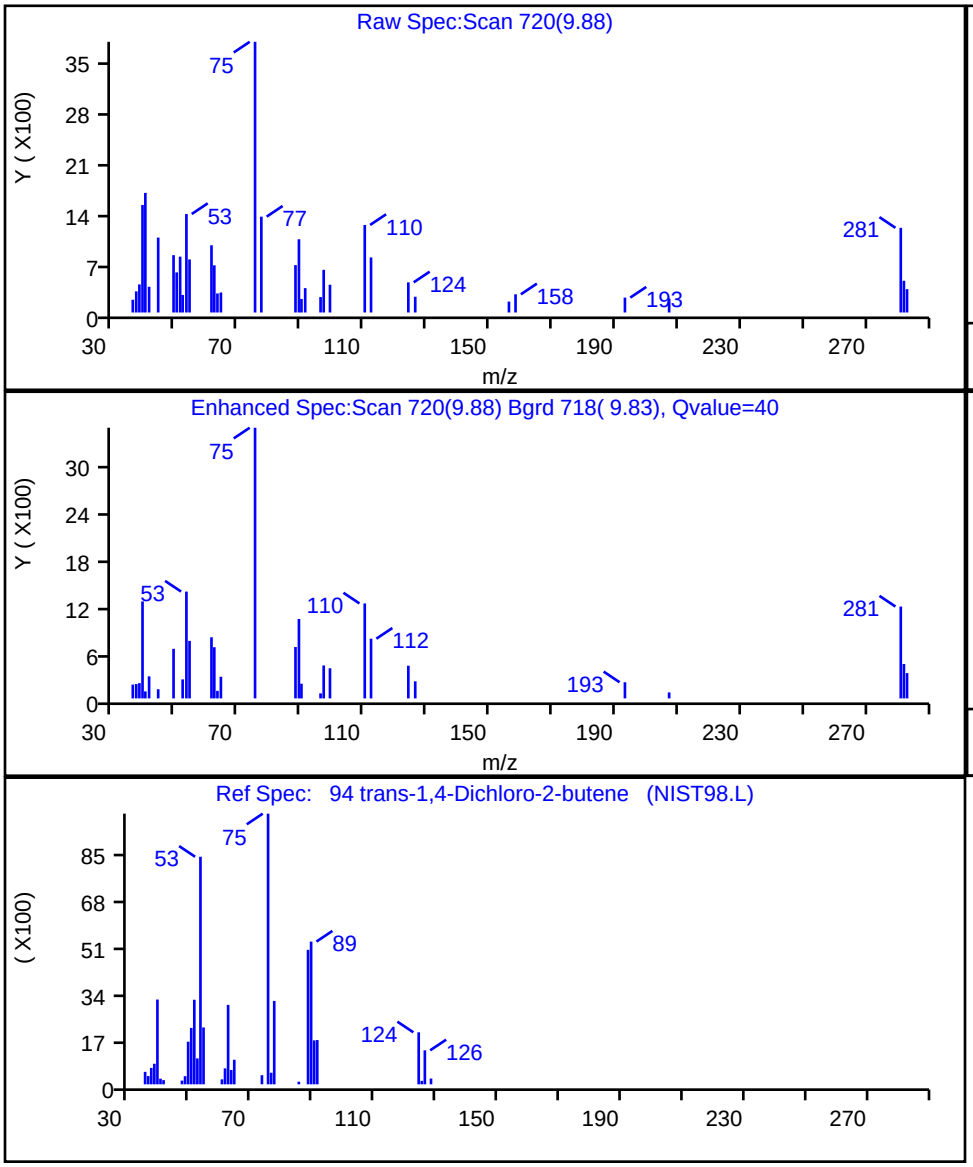
Injection Vol: 5.0 mL Dil. Factor: 1.0000

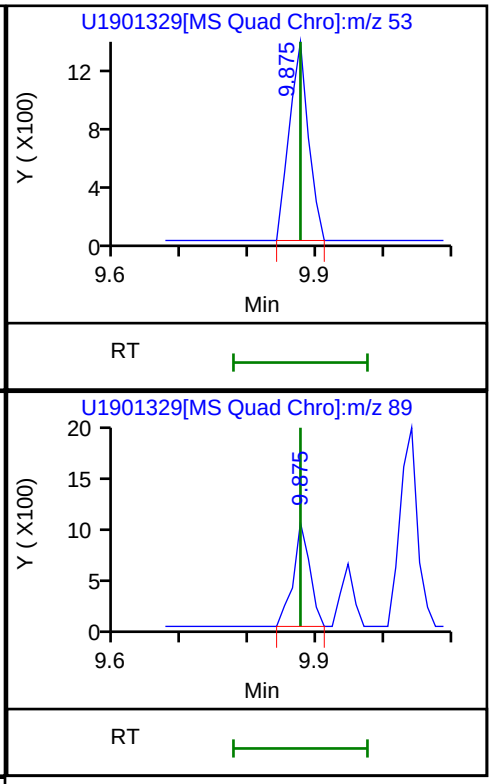
Method: 8260_19 Limit Group: MSV 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

94 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Processing Results





RT	Mass	Response	Amount
9.88	53.00	2712	0.490436
9.88	89.00	1752	

Reviewer: laveyt, 27-Aug-2018 19:50:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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-trifluoroethane	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
2-Methyl-2-propanol	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 (MEK)	Ave	0.0623	0.0642	0.0100	0.0412	0.0400	3.1	50.0
Chlorobromomethane	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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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
Dichlorobromomethane	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 (MIBK)	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
Chlorodibromomethane	Ave	0.3454	0.3577		0.0207	0.0200	3.6	30.0
Ethylene Dibromide	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
4-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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269802.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Apr-2019 16:46:30 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-015
Operator ID: 001904 Instrument ID: A3UX12
Sublist:

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:37:31 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: CTX0316

First Level Reviewer: bosworthh Date: 02-May-2019 11:54:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1259418	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.758	7.758	0.000	83	851416	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.971	-0.001	92	466847	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	4.539	4.539	0.000	94	331430	20.0	19.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.823	4.823	0.000	98	371514	20.0	19.7	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	92	1189609	20.0	19.7	
$ 7 4-Bromofluorobenzene (Surr	95	8.858	8.858	0.000	94	425722	20.0	19.2	
9 Dichlorodifluoromethane	85	1.415	1.403	0.012	99	405832	20.0	16.7	
10 Chloromethane	50	1.593	1.581	0.012	99	413696	20.0	19.5	M
11 Butadiene	54	1.640	1.640	0.000	89	422228	20.0	18.1	
12 Vinyl chloride	62	1.687	1.675	0.012	98	476883	20.0	20.1	
14 Bromomethane	94	1.924	1.912	0.012	90	280106	20.0	19.1	
15 Chloroethane	64	1.995	1.995	0.000	99	289966	20.0	19.4	
16 Dichlorofluoromethane	67	2.172	2.172	0.000	97	629342	20.0	21.1	
17 Trichlorofluoromethane	101	2.220	2.220	0.000	98	513365	20.0	19.4	
19 Ethyl ether	59	2.433	2.433	0.000	89	329369	20.0	20.7	
20 Acrolein	56	2.551	2.551	0.000	99	409129	100.0	86.1	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	98	532370	20.0	20.4	
22 1,1,2-Trichloro-1,2,2-trif	101	2.669	2.669	0.000	94	353091	20.0	20.5	
23 Acetone	43	2.693	2.693	0.000	100	391714	40.0	42.3	
24 Iodomethane	142	2.764	2.764	0.000	98	543731	20.0	19.6	
25 Carbon disulfide	76	2.847	2.823	0.024	99	1083802	20.0	18.1	
27 3-Chloro-1-propene	41	2.953	2.953	0.000	92	573835	20.0	19.3	
28 Methyl acetate	43	2.977	2.977	0.000	97	844749	40.0	38.5	
29 Methylene Chloride	49	3.060	3.060	0.000	90	471457	20.0	19.5	
30 2-Methyl-2-propanol	59	3.166	3.166	0.000	100	987948	200.0	214.3	
31 Acrylonitrile	53	3.273	3.273	0.000	99	2235056	200.0	196.0	
33 Methyl tert-butyl ether	73	3.297	3.285	0.012	94	1064379	20.0	20.1	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	97	512174	20.0	20.0	
34 Hexane	57	3.521	3.510	0.011	89	564057	20.0	20.2	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	630828	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	791608	20.0	22.1	
40 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	80	421134	20.0	19.4	
41 2,2-Dichloropropane	77	4.137	4.137	0.000	70	389030	20.0	18.8	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	99	161737	40.0	41.2	
46 Chlorobromomethane	49	4.338	4.338	0.000	94	292354	20.0	19.2	
47 Tetrahydrofuran	42	4.373	4.373	0.000	85	384062	40.0	40.7	
48 Chloroform	83	4.409	4.397	0.012	93	604929	20.0	19.8	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	536242	20.0	20.5	
50 Cyclohexane	84	4.598	4.598	0.000	87	638312	20.0	20.1	
52 Carbon tetrachloride	117	4.693	4.693	0.000	80	449179	20.0	20.2	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	96	516359	20.0	20.0	
53 Isobutyl alcohol	41	4.788	4.788	0.000	95	668811	500.0	534.2	
54 Benzene	78	4.870	4.870	0.000	95	1461247	20.0	19.7	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	449407	20.0	19.7	
57 n-Heptane	57	5.071	5.071	0.000	89	306524	20.0	20.4	
59 Trichloroethene	130	5.403	5.403	0.000	96	394562	20.0	19.9	
61 Methylcyclohexane	83	5.568	5.568	0.000	86	698584	20.0	19.7	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	94	321931	20.0	20.5	
64 Dibromomethane	174	5.710	5.710	0.000	94	251580	20.0	18.9	
65 1,4-Dioxane	88	5.722	5.722	0.000	91	125486	400.0	498.0	
66 Dichlorobromomethane	83	5.829	5.829	0.000	100	427012	20.0	20.0	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	233209	20.0	20.5	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	96	537264	20.0	20.6	
70 4-Methyl-2-pentanone (MIBK	43	6.349	6.349	0.000	95	976381	40.0	40.4	
71 Toluene	91	6.515	6.515	0.000	99	1422238	20.0	20.0	
72 trans-1,3-Dichloropropene	75	6.704	6.704	0.000	92	452861	20.0	19.6	
74 Ethyl methacrylate	69	6.775	6.775	0.000	89	452252	20.0	20.4	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	90	289983	20.0	20.5	
76 Tetrachloroethene	166	7.000	7.000	0.000	96	381853	20.0	20.2	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	88	502713	20.0	20.0	
78 2-Hexanone	43	7.095	7.095	0.000	93	693681	40.0	40.7	
80 Chlorodibromomethane	129	7.225	7.225	0.000	93	304567	20.0	20.7	
81 Ethylene Dibromide	107	7.332	7.332	0.000	99	307071	20.0	20.2	
83 Chlorobenzene	112	7.781	7.781	0.000	96	907166	20.0	19.7	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	323236	20.0	20.1	
85 Ethylbenzene	106	7.876	7.876	0.000	98	513744	20.0	20.0	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	647955	20.0	20.3	
87 o-Xylene	106	8.361	8.361	0.000	95	641716	20.0	19.9	
88 Styrene	104	8.373	8.373	0.000	95	983663	20.0	19.1	
89 Bromoform	173	8.550	8.550	0.000	98	220246	20.0	20.7	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	1710910	20.0	20.4	
93 Bromobenzene	156	9.000	9.000	0.000	88	398025	20.0	19.7	
92 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	87	483078	20.0	21.0	
94 trans-1,4-Dichloro-2-buten	53	9.047	9.047	0.000	92	150901	20.0	20.3	
95 1,2,3-Trichloropropane	110	9.047	9.047	0.000	84	180047	20.0	20.7	
96 N-Propylbenzene	120	9.107	9.107	0.000	99	468364	20.0	20.3	
97 2-Chlorotoluene	126	9.189	9.189	0.000	97	385849	20.0	20.0	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	1344408	20.0	20.3	
99 4-Chlorotoluene	126	9.296	9.296	0.000	97	382265	20.0	19.2	
102 tert-Butylbenzene	119	9.592	9.592	0.000	91	1234083	20.0	20.5	
104 1,2,4-Trimethylbenzene	105	9.639	9.639	0.000	96	1364531	20.0	19.9	
105 sec-Butylbenzene	105	9.805	9.805	0.000	93	1768239	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	764629	20.0	19.2	
107 4-Isopropyltoluene	119	9.947	9.947	0.000	97	1549141	20.0	20.6	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	778371	20.0	19.0	
111 n-Butylbenzene	91	10.349	10.349	0.000	96	1272624	20.0	19.9	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	99	749970	20.0	19.4	
113 1,2-Dibromo-3-Chloropropan	157	11.142	11.142	0.000	91	156261	20.0	20.8	
115 1,2,4-Trichlorobenzene	180	11.958	11.946	0.012	95	499249	20.0	18.5	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	96	210509	20.0	17.7	
117 Naphthalene	128	12.195	12.195	0.000	97	1671766	20.0	19.8	
118 1,2,3-Trichlorobenzene	180	12.443	12.443	0.000	96	464069	20.0	18.6	
S 124 Trihalomethanes, Total	1				0		80.0	81.2	
S 125 Total BTEX	1				0		100.0	100.0	
S 128 Xylenes, Total	106				0		40.0	40.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

vmfasgw_00307	Amount Added: 16.00	Units: uL		
vmfaspw_00297	Amount Added: 16.00	Units: uL		
vmfasaw_00277	Amount Added: 16.00	Units: uL		
vmDist_H2o_00144	Amount Added: 0.00	Units:	Run Reagent	
vm50is_stk_A_00003	Amount Added: 2.00	Units: uL	Run Reagent	
vm50ss_stk_00080	Amount Added: 2.00	Units: uL	Run Reagent	

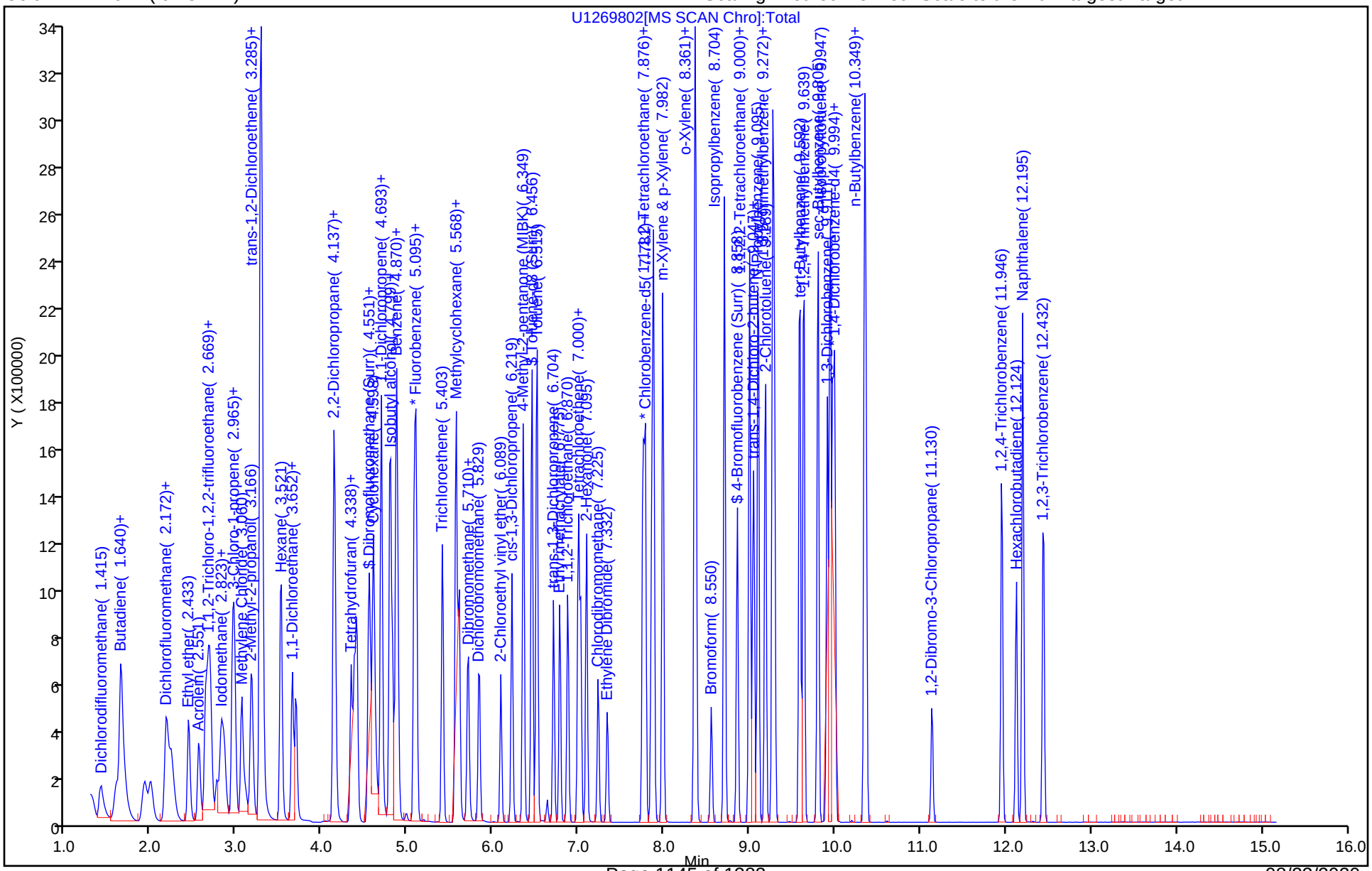
Report Date: 02-May-2019 11:54:26 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269802.D

Injection Date:	30-Apr-2019 16:46:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	ICV			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

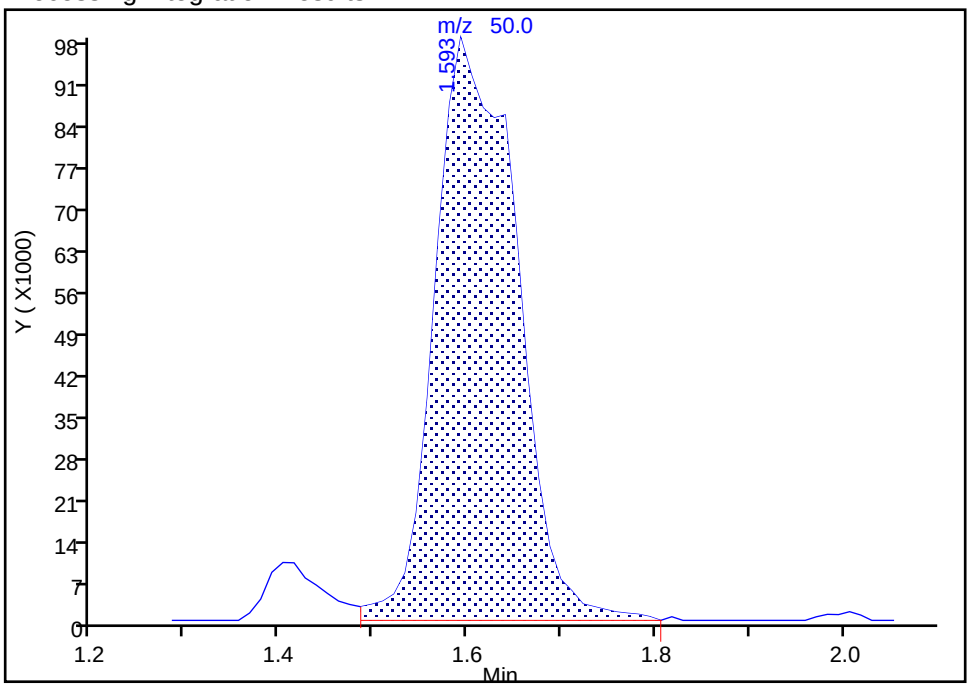
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269802.D
Injection Date: 30-Apr-2019 16:46:30 Instrument ID: A3UX12
Lims ID: ICV
Client ID:
Operator ID: 001904 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

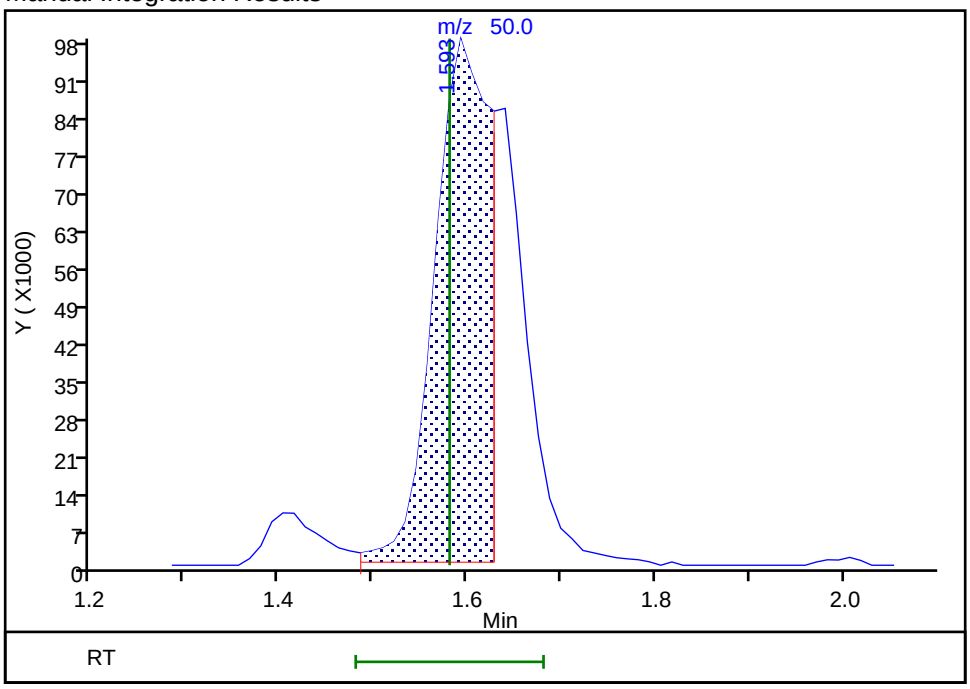
Processing Integration Results

RT: 1.59
Area: 598051
Amount: 28.146899
Amount Units: ug/l



Manual Integration Results

RT: 1.59
Area: 413696
Amount: 19.470345
Amount Units: ug/l



Reviewer: laveyt, 30-Apr-2019 17:05:20
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: ICV 240-442963/17 Calibration Date: 07/16/2020 20:43

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279121.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	0.3124	0.3509	0.1000	0.0225	0.0200	12.3	30.0
Chloromethane	Ave	0.5311	0.5904	0.1000	0.0222	0.0200	11.2	30.0
Butadiene	Ave	0.3681	0.4281		0.0233	0.0200	16.3	30.0
Vinyl chloride	Ave	0.3743	0.4391	0.1000	0.0235	0.0200	17.3	30.0
Bromomethane	Ave	0.2481	0.2751	0.0500	0.0222	0.0200	10.9	30.0
Chloroethane	Ave	0.2724	0.3111	0.0500	0.0228	0.0200	14.2	30.0
Dichlorofluoromethane	Ave	0.5688	0.6178		0.0217	0.0200	8.6	30.0
Trichlorofluoromethane	Ave	0.4377	0.4814	0.1000	0.0220	0.0200	10.0	30.0
Ethyl ether	Ave	0.3037	0.3304		0.0218	0.0200	8.8	30.0
Acrolein	Ave	0.0262	0.0321		0.123	0.100	22.6	30.0
1,1-Dichloroethene	Ave	0.4021	0.4100	0.1000	0.0204	0.0200	2.0	30.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2362	0.2354	0.0500	0.0199	0.0200	-0.3	30.0
Acetone	Ave	0.1273	0.1438	0.0100	0.0452	0.0400	12.9	50.0
Iodomethane	Ave	0.4091	0.4420		0.0216	0.0200	8.0	30.0
Carbon disulfide	Ave	0.8097	0.8205	0.1000	0.0203	0.0200	1.3	30.0
3-Chloro-1-propene	Ave	0.4509	0.4651		0.0206	0.0200	3.1	30.0
Methyl acetate	Ave	0.3065	0.3473	0.1000	0.0453	0.0400	13.3	50.0
Methylene Chloride	Ave	0.3674	0.4042	0.1000	0.0220	0.0200	10.0	50.0
tert-Butyl alcohol	Ave	0.0380	0.0557		0.293	0.200	46.7*	30.0
Acrylonitrile	Ave	0.1589	0.1738		0.219	0.200	9.4	30.0
trans-1,2-Dichloroethene	Ave	0.3859	0.4140	0.1000	0.0215	0.0200	7.3	30.0
Methyl tert-butyl ether	Ave	0.8861	0.9183	0.1000	0.0207	0.0200	3.6	30.0
Hexane	Ave	0.4275	0.4675		0.0219	0.0200	9.4	30.0
1,1-Dichloroethane	Ave	0.5143	0.6173	0.2000	0.0240	0.0200	20.0	30.0
Vinyl acetate	Ave	0.7246	0.7980		0.0220	0.0200	10.1	30.0
2,2-Dichloropropane	Ave	0.3526	0.3801		0.0216	0.0200	7.8	30.0
cis-1,2-Dichloroethene	Ave	0.3599	0.3890	0.1000	0.0216	0.0200	8.1	30.0
2-Butanone	Ave	0.0631	0.0726	0.0100	0.0460	0.0400	15.0	50.0
Bromochloromethane	Ave	0.2926	0.3171		0.0217	0.0200	8.4	30.0
Tetrahydrofuran	Ave	0.1611	0.1994		0.0495	0.0400	23.8	30.0
Chloroform	Ave	0.5092	0.5736	0.2000	0.0225	0.0200	12.6	30.0
1,1,1-Trichloroethane	Ave	0.4037	0.4657	0.1000	0.0231	0.0200	15.3	30.0
Cyclohexane	Ave	0.4779	0.5352	0.1000	0.0224	0.0200	12.0	30.0
1,1-Dichloropropene	Ave	0.4108	0.4615		0.0225	0.0200	12.3	30.0
Carbon tetrachloride	Ave	0.3288	0.3656	0.1000	0.0222	0.0200	11.2	30.0
Isobutyl alcohol	Ave	0.0161	0.0230		0.714	0.500	42.7*	30.0
Benzene	Ave	1.228	1.390	0.5000	0.0226	0.0200	13.2	30.0
1,2-Dichloroethane	Ave	0.3989	0.4554	0.1000	0.0228	0.0200	14.2	30.0
n-Heptane	Lin1		0.2072		0.0187	0.0200	-6.5	30.0
Trichloroethene	Ave	0.2776	0.2927	0.1500	0.0211	0.0200	5.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: ICV 240-442963/17 Calibration Date: 07/16/2020 20:43

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279121.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	0.4860	0.4602	0.1000	0.0189	0.0200	-5.3	30.0
1,2-Dichloropropane	Ave	0.2651	0.2751	0.1000	0.0207	0.0200	3.7	30.0
Dibromomethane	Ave	0.1882	0.2021		0.0215	0.0200	7.4	30.0
1,4-Dioxane	Ave	0.0035	0.0039		0.454	0.400	13.5	50.0
Bromodichloromethane	Ave	0.3312	0.3543	0.1500	0.0214	0.0200	7.0	30.0
2-Chloroethyl vinyl ether	Ave	0.1997	0.2025		0.0203	0.0200	1.4	30.0
cis-1,3-Dichloropropene	Ave	0.4197	0.4401	0.1500	0.0210	0.0200	4.9	50.0
4-Methyl-2-pentanone	Ave	0.4341	0.4137	0.0500	0.0381	0.0400	-4.7	50.0
Toluene	Ave	1.659	1.351	0.4000	0.0163	0.0200	-18.6	30.0
trans-1,3-Dichloropropene	Ave	0.5377	0.4494	0.1000	0.0167	0.0200	-16.4	30.0
Ethyl methacrylate	Ave	0.5422	0.4760		0.0176	0.0200	-12.2	30.0
1,1,2-Trichloroethane	Ave	0.3249	0.2775	0.1000	0.0171	0.0200	-14.6	30.0
Tetrachloroethene	Ave	0.3971	0.3339	0.1500	0.0168	0.0200	-15.9	30.0
1,3-Dichloropropane	Ave	0.6096	0.5170		0.0170	0.0200	-15.2	30.0
2-Hexanone	Ave	0.4350	0.4478	0.0500	0.0412	0.0400	2.9	50.0
Dibromochloromethane	Ave	0.3194	0.3179		0.0199	0.0200	-0.5	30.0
1,2-Dibromoethane	Ave	0.3359	0.3434		0.0204	0.0200	2.2	30.0
Chlorobenzene	Ave	0.9701	0.998	0.3000	0.0206	0.0200	2.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3307	0.3372		0.0204	0.0200	2.0	30.0
Ethylbenzene	Ave	0.5327	0.5515		0.0207	0.0200	3.5	30.0
m-Xylene & p-Xylene	Ave	0.6598	0.6862		0.0208	0.0200	4.0	30.0
o-Xylene	Ave	0.6795	0.6513		0.0192	0.0200	-4.1	30.0
Styrene	Ave	1.091	1.089	0.3000	0.0200	0.0200	-0.2	30.0
Bromoform	Ave	0.2201	0.2169	0.1000	0.0197	0.0200	-1.5	30.0
Isopropylbenzene	Ave	1.703	1.642	0.1000	0.0193	0.0200	-3.6	30.0
1,1,2,2-Tetrachloroethane	Ave	1.000	1.064	0.3000	0.0213	0.0200	6.4	30.0
Bromobenzene	Ave	0.7816	0.8109		0.0207	0.0200	3.7	30.0
1,2,3-Trichloropropane	Ave	0.3449	0.3582		0.0208	0.0200	3.8	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2927	0.3519		0.0240	0.0200	20.2	30.0
n-Propylbenzene	Ave	0.8506	0.9062		0.0213	0.0200	6.5	30.0
2-Chlorotoluene	Ave	0.7510	0.7708		0.0205	0.0200	2.6	30.0
1,3,5-Trimethylbenzene	Ave	2.508	2.720		0.0217	0.0200	8.5	30.0
4-Chlorotoluene	Ave	0.7704	0.7927		0.0206	0.0200	2.9	30.0
tert-Butylbenzene	Ave	2.195	2.312		0.0211	0.0200	5.3	30.0
1,2,4-Trimethylbenzene	Ave	2.634	2.787		0.0212	0.0200	5.8	30.0
sec-Butylbenzene	Ave	3.184	3.288		0.0207	0.0200	3.3	30.0
1,3-Dichlorobenzene	Ave	1.484	1.505	0.6000	0.0203	0.0200	1.4	30.0
p-Isopropyltoluene	Ave	2.648	2.880		0.0218	0.0200	8.8	30.0
1,4-Dichlorobenzene	Ave	1.537	1.557	0.5000	0.0203	0.0200	1.3	30.0
n-Butylbenzene	Ave	2.220	2.439		0.0220	0.0200	9.8	30.0
1,2-Dichlorobenzene	Ave	1.473	1.461	0.4000	0.0198	0.0200	-0.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: ICV 240-442963/17 Calibration Date: 07/16/2020 20:43

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279121.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	0.2336	0.2648	0.0500	0.0227	0.0200	13.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8111	0.9289	0.2000	0.0229	0.0200	14.5	50.0
Hexachlorobutadiene	Ave	0.3104	0.3818		0.0246	0.0200	23.0	50.0
Naphthalene	Ave	2.686	3.079		0.0229	0.0200	14.6	50.0
1,2,3-Trichlorobenzene	Ave	0.7472	0.8510		0.0228	0.0200	13.9	30.0
Dibromofluoromethane (Surr)	Ave	0.2655	0.2811		0.0212	0.0200	5.9	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3249	0.3526		0.0217	0.0200	8.5	30.0
Toluene-d8 (Surr)	Ave	1.353	1.134		0.0168	0.0200	-16.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4632	0.4776		0.0206	0.0200	3.1	30.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279121.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Jul-2020 20:43:30 ALS Bottle#: 13 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-017
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12*sub56

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Jul-2020 16:45:48 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1036

First Level Reviewer: bosworthh Date: 17-Jul-2020 16:59:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	993337	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	838058	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.000	92	407737	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	279224	20.0	21.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.823	0.000	97	350252	20.0	21.7	
$ 6 Toluene-d8 (Surr)	98	6.456	6.456	0.000	93	949955	20.0	16.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	95	400258	20.0	20.6	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	348544	20.0	22.5	
10 Chloromethane	50	1.605	1.605	0.000	99	586447	20.0	22.2	
11 Butadiene	54	1.652	1.652	0.000	88	425236	20.0	23.3	
12 Vinyl chloride	62	1.699	1.687	0.012	98	436198	20.0	23.5	
14 Bromomethane	94	1.936	1.936	0.000	91	273299	20.0	22.2	
15 Chloroethane	64	1.995	1.995	0.000	100	309023	20.0	22.8	
16 Dichlorofluoromethane	67	2.184	2.184	0.000	97	613723	20.0	21.7	
17 Trichlorofluoromethane	101	2.184	2.184	0.000	63	478218	20.0	22.0	
19 Ethyl ether	59	2.433	2.445	-0.012	92	328196	20.0	21.8	
20 Acrolein	56	2.551	2.563	-0.012	99	159396	100.0	122.6	
21 1,1-Dichloroethene	61	2.634	2.634	0.000	98	407247	20.0	20.4	
22 112TCTFE	101	2.670	2.670	0.000	94	233841	20.0	19.9	
23 Acetone	43	2.693	2.693	0.000	100	285678	40.0	45.2	
24 Iodomethane	142	2.764	2.776	-0.012	98	439011	20.0	21.6	
25 Carbon disulfide	76	2.823	2.823	0.000	100	815013	20.0	20.3	
27 3-Chloro-1-propene	41	2.954	2.954	0.000	89	461947	20.0	20.6	
28 Methyl acetate	43	2.977	2.977	0.000	97	689875	40.0	45.3	
29 Methylene Chloride	49	3.060	3.060	0.000	93	401453	20.0	22.0	
30 2-Methyl-2-propanol	59	3.167	3.167	0.000	99	553660	200.0	293.5	
31 Acrylonitrile	53	3.273	3.285	-0.012	99	1725957	200.0	218.8	
32 trans-1,2-Dichloroethene	61	3.285	3.297	-0.012	67	411242	20.0	21.5	
33 Methyl tert-butyl ether	73	3.297	3.297	0.000	96	912225	20.0	20.7	
34 Hexane	57	3.522	3.522	0.000	91	464381	20.0	21.9	
35 1,1-Dichloroethane	63	3.652	3.652	0.000	96	613203	20.0	24.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.699	-0.012	97	792663	20.0	22.0	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	83	386440	20.0	21.6	
40 2,2-Dichloropropane	77	4.137	4.137	0.000	60	377531	20.0	21.6	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	100	144149	40.0	46.0	
46 Chlorobromomethane	49	4.338	4.338	0.000	97	314975	20.0	21.7	
47 Tetrahydrofuran	42	4.374	4.374	0.000	88	396167	40.0	49.5	
48 Chloroform	83	4.397	4.409	-0.012	94	569805	20.0	22.5	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	462552	20.0	23.1	
50 Cyclohexane	84	4.598	4.598	0.000	91	531634	20.0	22.4	
51 1,1-Dichloropropene	75	4.693	4.693	0.000	94	458449	20.0	22.5	
52 Carbon tetrachloride	117	4.693	4.693	0.000	77	363141	20.0	22.2	
53 Isobutyl alcohol	41	4.788	4.788	0.000	95	571724	500.0	713.6	
54 Benzene	78	4.871	4.870	0.001	96	1380254	20.0	22.6	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	452321	20.0	22.8	
57 n-Heptane	57	5.072	5.083	-0.011	90	205767	20.0	18.7	
59 Trichloroethene	130	5.403	5.403	0.000	96	290757	20.0	21.1	
61 Methylcyclohexane	83	5.569	5.569	0.000	88	457177	20.0	18.9	
62 1,2-Dichloropropane	63	5.604	5.604	0.000	95	273216	20.0	20.7	
65 1,4-Dioxane	88	5.711	5.711	0.000	92	77958	400.0	453.8	
64 Dibromomethane	174	5.699	5.711	-0.012	94	200761	20.0	21.5	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	351960	20.0	21.4	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	201159	20.0	20.3	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	437123	20.0	21.0	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	95	821820	40.0	38.1	
71 Toluene	91	6.515	6.515	0.000	99	1132493	20.0	16.3	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	95	376655	20.0	16.7	
74 Ethyl methacrylate	69	6.776	6.776	0.000	90	398944	20.0	17.6	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	93	232540	20.0	17.1	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	279828	20.0	16.8	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	433260	20.0	17.0	
78 2-Hexanone	43	7.083	7.095	-0.012	96	750568	40.0	41.2	
80 Chlorodibromomethane	129	7.225	7.225	0.000	90	266384	20.0	19.9	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	287765	20.0	20.4	
83 Chlorobenzene	112	7.781	7.781	0.000	95	836668	20.0	20.6	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	94	282602	20.0	20.4	
85 Ethylbenzene	106	7.876	7.876	0.000	98	462200	20.0	20.7	
86 m-Xylene & p-Xylene	106	7.983	7.983	0.000	99	575048	20.0	20.8	
87 o-Xylene	106	8.361	8.361	0.000	94	545846	20.0	19.2	
88 Styrene	104	8.373	8.373	0.000	96	912644	20.0	20.0	
89 Bromoform	173	8.551	8.551	0.000	97	181797	20.0	19.7	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	1376423	20.0	19.3	
92 Bromobenzene	156	9.000	9.000	0.000	94	330644	20.0	20.7	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	433631	20.0	21.3	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	85	146054	20.0	20.8	
95 trans-1,4-Dichloro-2-butene	53	9.048	9.048	0.000	92	143465	20.0	24.0	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	369474	20.0	21.3	
97 2-Chlorotoluene	126	9.190	9.178	0.012	97	314297	20.0	20.5	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	1109190	20.0	21.7	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	323205	20.0	20.6	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	942757	20.0	21.1	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	1136160	20.0	21.2	
105 sec-Butylbenzene	105	9.793	9.793	0.000	95	1340543	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	613552	20.0	20.3	
107 4-Isopropyltoluene	119	9.935	9.947	-0.012	97	1174175	20.0	21.8	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	94	634809	20.0	20.3	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	994318	20.0	22.0	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	97	595587	20.0	19.8	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	84	107973	20.0	22.7	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	94	378752	20.0	22.9	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	155689	20.0	24.6	
117 Naphthalene	128	12.195	12.195	0.000	97	1255549	20.0	22.9	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	95	346971	20.0	22.8	
S 124 Trihalomethanes, Total	1				0		80.0	83.5	
S 125 Total BTEX	1				0		100.0	99.6	
S 128 Xylenes, Total	106				0		40.0	40.0	

Reagents:

vmfasgw_00367	Amount Added: 16.00	Units: uL	
vmfaspw_00358	Amount Added: 16.00	Units: uL	
vmfasaw_00336	Amount Added: 16.00	Units: uL	
vmDist_H2o_00176	Amount Added: 0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added: 2.00	Units: uL	Run Reagent
vm50is_stk_a_00006	Amount Added: 2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added: 0.00	Units:	Run Reagent

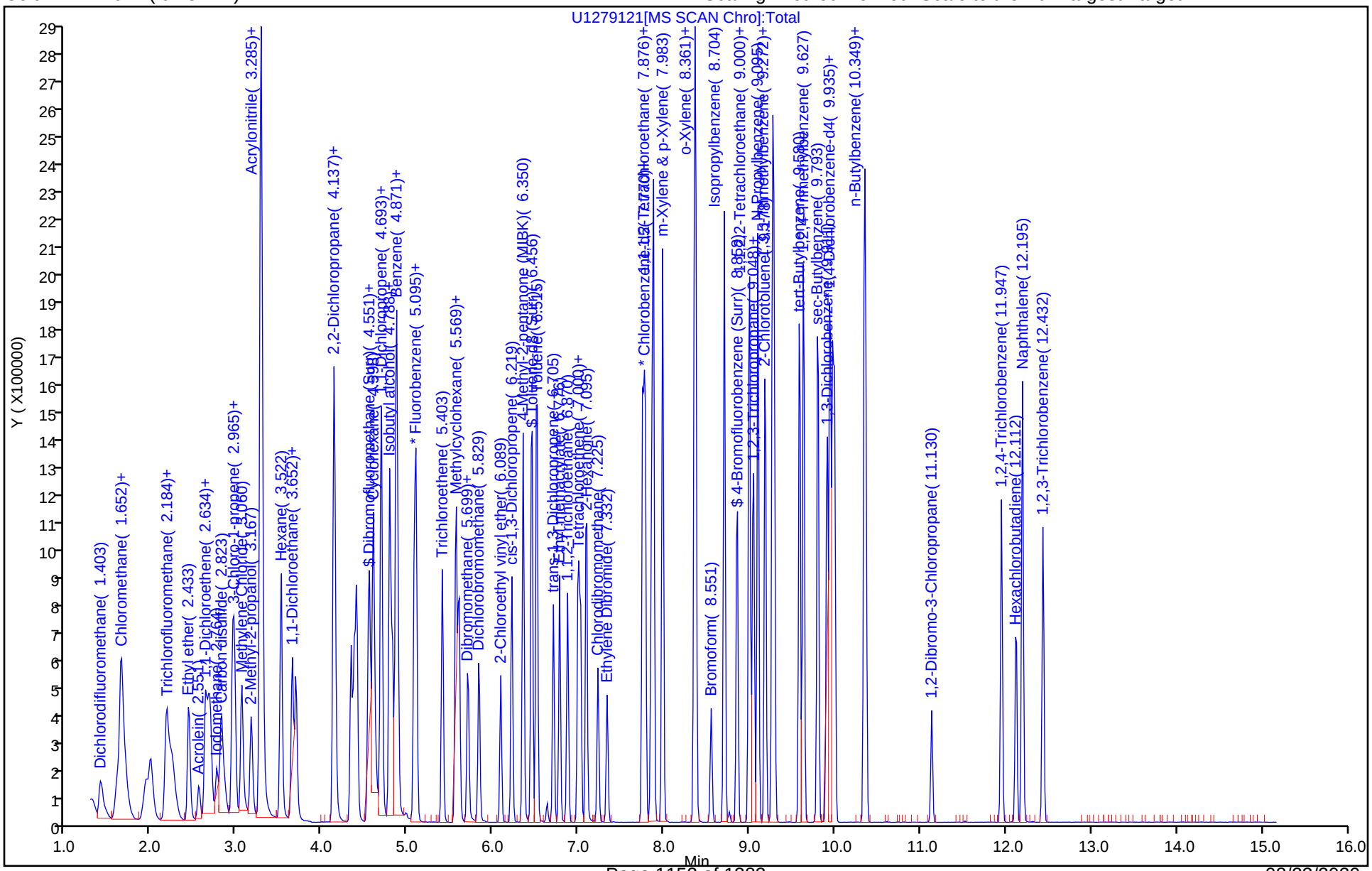
Report Date: 17-Jul-2020 17:00:02 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279121.D

Injection Date:	16-Jul-2020 20:43:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447867/3 Calibration Date: 08/19/2020 15:46

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: U1279807.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		0.0669		0.214	0.200	7.2	20.0
Diisopropyl ether	Ave	0.2698	0.2626		0.0195	0.0200	-2.7	20.0
2-Chloro-1,3-butadiene	Ave	0.4548	0.5242		0.0231	0.0200	15.3	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8827	0.9421		0.0213	0.0200	6.7	20.0
Ethyl acetate	Ave	0.3663	0.4489		0.0490	0.0400	22.5*	20.0
Propionitrile	Lin1		0.0755		0.198	0.200	-0.9	20.0
Methacrylonitrile	Ave	0.2471	0.3044		0.246	0.200	23.2*	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.9065	0.9757		0.0215	0.0200	7.6	20.0
n-Butanol	Ave	0.0237	0.0205		0.432	0.500	-13.5	20.0
Ethyl acrylate	Ave	0.3838	0.4941		0.0258	0.0200	28.8*	20.0
Methyl methacrylate	Ave	0.2550	0.3480		0.0546	0.0400	36.5*	20.0
2-Nitropropane	Ave	0.0769	0.1082		0.0563	0.0400	40.7*	20.0
n-Butyl acetate	Ave	0.7023	0.9193		0.0262	0.0200	30.9*	20.0
1-Chlorohexane	Ave	0.5721	0.6268		0.0219	0.0200	9.6	20.0
Cyclohexanone	Lin1		0.0248		0.178	0.200	-10.9	20.0
Pentachloroethane	Ave	0.4435	0.4128		0.0372	0.0400	-6.9	20.0
1,2,3-Trimethylbenzene	Ave	2.954	2.893		0.0196	0.0200	-2.1	20.0
Benzyl chloride	Ave	2.132	2.219		0.0208	0.0200	4.1	20.0
1,3,5-Trichlorobenzene	Ave	1.258	1.044		0.0166	0.0200	-17.1	20.0
2-Methylnaphthalene	Ave	2.484	1.476		0.0238	0.0400	-40.6*	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279807.D
Lims ID: CCV A9
Client ID:
Sample Type: CCV
Inject. Date: 19-Aug-2020 15:46:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-003
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub4

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 16:06:58 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 16:06:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	996518	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	687351	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	354415	20.0	20.0	
26 Acetonitrile	41	2.930	2.930	0.000	99	666482	200.0	214.4	
37 Isopropyl ether	87	3.699	3.699	0.000	95	261710	20.0	19.5	
38 2-Chloro-1,3-butadiene	53	3.723	3.723	0.000	91	522365	20.0	23.1	
39 Tert-butyl ethyl ether	59	4.007	4.007	0.000	98	938789	20.0	21.3	
43 Ethyl acetate	43	4.196	4.196	0.000	99	894565	40.0	49.0	
44 Propionitrile	54	4.208	4.208	0.000	99	752676	200.0	198.2	
45 Methacrylonitrile	41	4.326	4.326	0.000	94	3033103	200.0	246.4	
56 Tert-amyl methyl ether	73	4.953	4.953	0.000	98	972304	20.0	21.5	
58 n-Butanol	56	5.344	5.344	0.000	86	509946	500.0	432.3	
60 Ethyl acrylate	55	5.486	5.486	0.000	99	492391	20.0	25.8	
63 Methyl methacrylate	41	5.687	5.687	0.000	93	693649	40.0	54.6	
67 2-Nitropropane	41	6.030	6.030	0.000	97	215543	40.0	56.3	
79 n-Butyl acetate	43	7.202	7.202	0.000	99	631860	20.0	26.2	
82 1-Chlorohexane	91	7.746	7.746	0.000	85	430800	20.0	21.9	
91 Cyclohexanone	55	8.799	8.799	0.000	94	170729	200.0	178.2	
103 Pentachloroethane	167	9.604	9.604	0.000	92	292614	40.0	37.2	
109 1,2,3-Trimethylbenzene	105	10.041	10.041	0.000	99	1025409	20.0	19.6	
110 Benzyl chloride	91	10.136	10.136	0.000	99	786446	20.0	20.8	
114 1,3,5-Trichlorobenzene	180	11.331	11.331	0.000	97	369832	20.0	16.6	
119 2-Methylnaphthalene	142	13.366	13.366	0.000	94	1046092	40.0	23.8	
168 1-Methylnaphthalene	142	13.591	13.591	0.000	0	926968	NC	NC	
169 Isooctane	57		0.000				ND	ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

vmra9w_00357	Amount Added:	16.00	Units: uL
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL

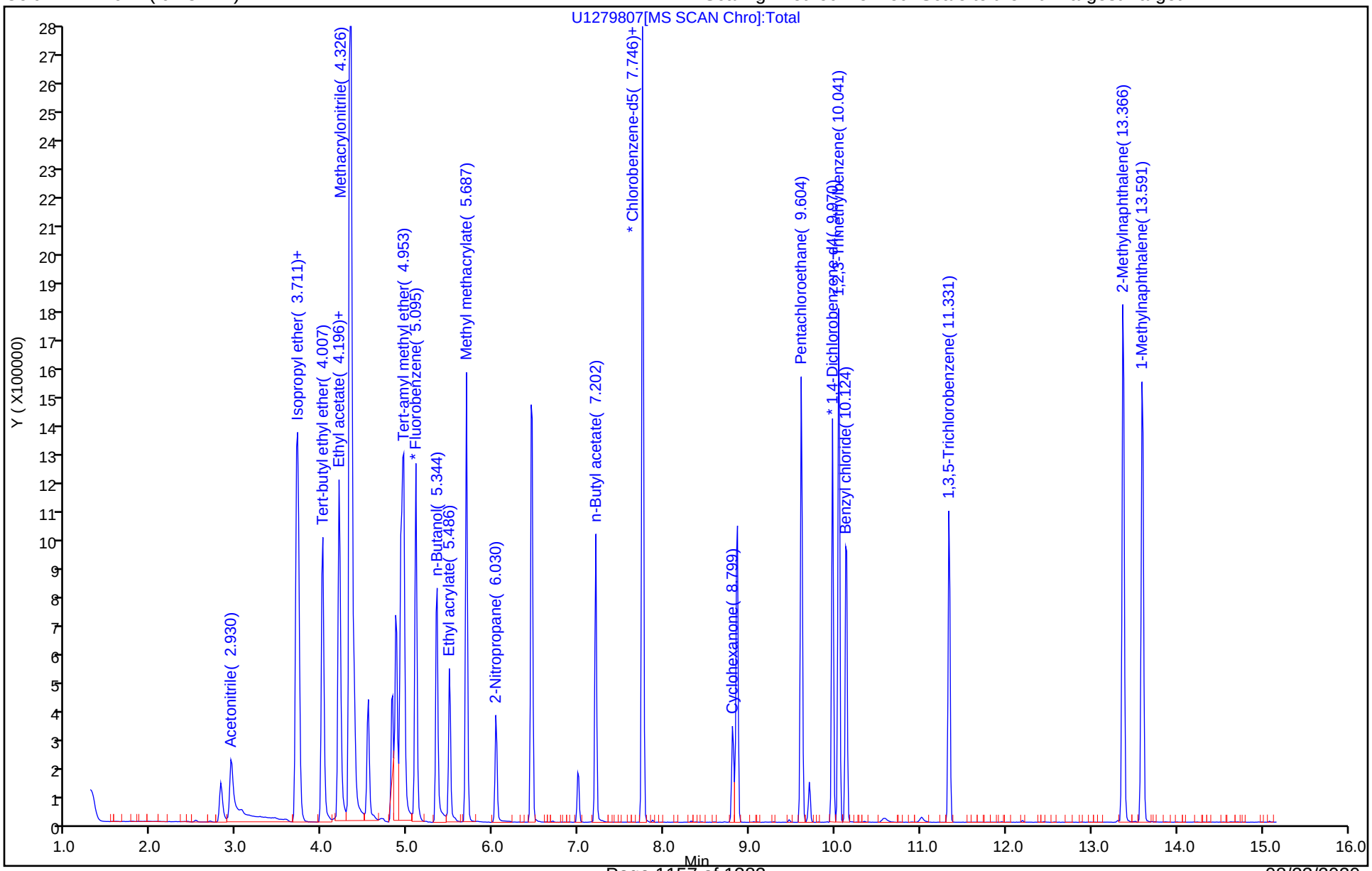
Report Date: 19-Aug-2020 16:06:59 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279807.D

Injection Date:	19-Aug-2020 15:46:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	CCV A9			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447867/4 Calibration Date: 08/19/2020 16:09

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279808.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	0.3124	0.3745	0.1000	0.0240	0.0200	19.9	20.0
Chloromethane	Ave	0.5311	0.5683	0.1000	0.0214	0.0200	7.0	20.0
Butadiene	Ave	0.3681	0.4435		0.0241	0.0200	20.5*	20.0
Vinyl chloride	Ave	0.3743	0.3924	0.1000	0.0210	0.0200	4.8	20.0
Bromomethane	Ave	0.2481	0.2177	0.0500	0.0175	0.0200	-12.3	20.0
Chloroethane	Ave	0.2724	0.2503	0.0500	0.0184	0.0200	-8.1	20.0
Dichlorofluoromethane	Ave	0.5688	0.4894		0.0172	0.0200	-14.0	20.0
Trichlorofluoromethane	Ave	0.4377	0.4048	0.1000	0.0185	0.0200	-7.5	20.0
Ethyl ether	Ave	0.3037	0.2692		0.0177	0.0200	-11.4	20.0
Acrolein	Ave	0.0262	0.0314		0.120	0.100	20.1*	20.0
1,1-Dichloroethene	Ave	0.4021	0.4201	0.1000	0.0209	0.0200	4.5	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2362	0.2484	0.0500	0.0210	0.0200	5.2	20.0
Acetone	Ave	0.1273	0.1443	0.0100	0.0453	0.0400	13.3	50.0
Iodomethane	Ave	0.4091	0.3831		0.0187	0.0200	-6.3	20.0
Carbon disulfide	Ave	0.8097	0.8605	0.1000	0.0213	0.0200	6.3	20.0
3-Chloro-1-propene	Ave	0.4509	0.5139		0.0228	0.0200	14.0	20.0
Methyl acetate	Ave	0.3065	0.3774	0.1000	0.0492	0.0400	23.1	50.0
Methylene Chloride	Ave	0.3674	0.3889	0.1000	0.0212	0.0200	5.8	50.0
tert-Butyl alcohol	Ave	0.0380	0.0515		0.271	0.200	35.7*	20.0
Acrylonitrile	Ave	0.1589	0.1733		0.218	0.200	9.1	20.0
Methyl tert-butyl ether	Ave	0.8861	0.8653	0.1000	0.0195	0.0200	-2.3	20.0
trans-1,2-Dichloroethene	Ave	0.3859	0.4146	0.1000	0.0215	0.0200	7.4	20.0
Hexane	Ave	0.4275	0.4892		0.0229	0.0200	14.4	20.0
1,1-Dichloroethane	Ave	0.5143	0.5240	0.2000	0.0204	0.0200	1.9	20.0
Vinyl acetate	Ave	0.7246	0.6810		0.0188	0.0200	-6.0	20.0
2,2-Dichloropropane	Ave	0.3526	0.3312		0.0188	0.0200	-6.1	20.0
cis-1,2-Dichloroethene	Ave	0.3599	0.3045	0.1000	0.0169	0.0200	-15.4	20.0
2-Butanone	Ave	0.0631	0.0630	0.0100	0.0399	0.0400	-0.2	50.0
Bromochloromethane	Ave	0.2926	0.2662		0.0182	0.0200	-9.0	20.0
Tetrahydrofuran	Ave	0.1611	0.2961		0.0735	0.0400	83.8*	20.0
Chloroform	Ave	0.5092	0.4560	0.2000	0.0179	0.0200	-10.5	20.0
1,1,1-Trichloroethane	Ave	0.4037	0.3923	0.1000	0.0194	0.0200	-2.8	20.0
Cyclohexane	Ave	0.4779	0.4873	0.1000	0.0204	0.0200	2.0	20.0
1,1-Dichloropropene	Ave	0.4108	0.4159		0.0202	0.0200	1.2	20.0
Carbon tetrachloride	Ave	0.3288	0.3222	0.1000	0.0196	0.0200	-2.0	20.0
Isobutyl alcohol	Ave	0.0161	0.0206		0.637	0.500	27.5*	20.0
Benzene	Ave	1.228	1.196	0.5000	0.0195	0.0200	-2.6	20.0
1,2-Dichloroethane	Ave	0.3989	0.3625	0.1000	0.0182	0.0200	-9.1	20.0
n-Heptane	Lin1		0.2343		0.0216	0.0200	7.9	20.0
Trichloroethene	Ave	0.2776	0.2789	0.1500	0.0201	0.0200	0.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447867/4 Calibration Date: 08/19/2020 16:09

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279808.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	0.4860	0.5280	0.1000	0.0217	0.0200	8.6	20.0
1,2-Dichloropropane	Ave	0.2651	0.2800	0.1000	0.0211	0.0200	5.6	20.0
Dibromomethane	Ave	0.1882	0.1742		0.0185	0.0200	-7.4	20.0
1,4-Dioxane	Ave	0.0035	0.0043		0.494	0.400	23.6	50.0
Bromodichloromethane	Ave	0.3312	0.3260	0.1500	0.0197	0.0200	-1.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1997	0.2186		0.0438	0.0400	9.4	20.0
cis-1,3-Dichloropropene	Ave	0.4197	0.4412	0.1500	0.0210	0.0200	5.1	50.0
4-Methyl-2-pentanone	Ave	0.4341	0.4641	0.0500	0.0428	0.0400	6.9	50.0
Toluene	Ave	1.659	1.664	0.4000	0.0201	0.0200	0.3	20.0
trans-1,3-Dichloropropene	Ave	0.5377	0.5660	0.1000	0.0211	0.0200	5.3	20.0
Ethyl methacrylate	Ave	0.5422	0.6025		0.0222	0.0200	11.1	20.0
1,1,2-Trichloroethane	Ave	0.3249	0.3193	0.1000	0.0197	0.0200	-1.7	20.0
Tetrachloroethene	Ave	0.3971	0.4036	0.1500	0.0203	0.0200	1.6	20.0
1,3-Dichloropropane	Ave	0.6096	0.6241		0.0205	0.0200	2.4	20.0
2-Hexanone	Ave	0.4350	0.4983	0.0500	0.0458	0.0400	14.5	50.0
Dibromochloromethane	Ave	0.3194	0.3187		0.0200	0.0200	-0.2	20.0
1,2-Dibromoethane	Ave	0.3359	0.3386		0.0202	0.0200	0.8	20.0
Chlorobenzene	Ave	0.9701	0.995	0.3000	0.0205	0.0200	2.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3307	0.3364		0.0203	0.0200	1.7	20.0
Ethylbenzene	Ave	0.5327	0.5737		0.0215	0.0200	7.7	20.0
m-Xylene & p-Xylene	Ave	0.6598	0.7123		0.0216	0.0200	8.0	20.0
o-Xylene	Ave	0.6795	0.6999		0.0206	0.0200	3.0	20.0
Styrene	Ave	1.091	1.162	0.3000	0.0213	0.0200	6.6	20.0
Bromoform	Ave	0.2201	0.2308	0.1000	0.0210	0.0200	4.8	20.0
Isopropylbenzene	Ave	1.703	1.831	0.1000	0.0215	0.0200	7.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.000	1.045	0.3000	0.0209	0.0200	4.5	20.0
Bromobenzene	Ave	0.7816	0.7955		0.0204	0.0200	1.8	20.0
1,2,3-Trichloropropane	Ave	0.3449	0.3582		0.0208	0.0200	3.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2927	0.2690		0.0184	0.0200	-8.1	20.0
n-Propylbenzene	Ave	0.8506	0.9452		0.0222	0.0200	11.1	20.0
2-Chlorotoluene	Ave	0.7510	0.7791		0.0207	0.0200	3.7	20.0
1,3,5-Trimethylbenzene	Ave	2.508	2.760		0.0220	0.0200	10.0	20.0
4-Chlorotoluene	Ave	0.7704	0.8001		0.0208	0.0200	3.8	20.0
tert-Butylbenzene	Ave	2.195	2.416		0.0220	0.0200	10.1	20.0
1,2,4-Trimethylbenzene	Ave	2.634	2.764		0.0210	0.0200	4.9	20.0
sec-Butylbenzene	Ave	3.184	3.437		0.0216	0.0200	7.9	20.0
1,3-Dichlorobenzene	Ave	1.484	1.494	0.6000	0.0201	0.0200	0.7	20.0
p-Isopropyltoluene	Ave	2.648	2.927		0.0221	0.0200	10.5	20.0
1,4-Dichlorobenzene	Ave	1.537	1.522	0.5000	0.0198	0.0200	-0.9	20.0
n-Butylbenzene	Ave	2.220	2.490		0.0224	0.0200	12.2	20.0
1,2-Dichlorobenzene	Ave	1.473	1.477	0.4000	0.0201	0.0200	0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447867/4 Calibration Date: 08/19/2020 16:09

Instrument ID: A3UX12 Calib Start Date: 07/16/2020 17:43

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/16/2020 20:20

Lab File ID: U1279808.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	0.2336	0.2752	0.0500	0.0236	0.0200	17.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8111	0.9128	0.2000	0.0225	0.0200	12.5	50.0
Hexachlorobutadiene	Ave	0.3104	0.3300		0.0213	0.0200	6.3	50.0
Naphthalene	Ave	2.686	3.133		0.0233	0.0200	16.6	50.0
1,2,3-Trichlorobenzene	Ave	0.7472	0.8583		0.0230	0.0200	14.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2655	0.2354		0.0177	0.0200	-11.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3249	0.2955		0.0182	0.0200	-9.1	20.0
Toluene-d8 (Surr)	Ave	1.353	1.383		0.0204	0.0200	2.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4632	0.5096		0.0220	0.0200	10.0	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279808.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Aug-2020 16:09:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-004
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 16:39:16 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 16:39:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	98	1010042	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	86	700125	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	361557	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	237767	20.0	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.811	4.811	0.000	96	298451	20.0	18.2	
$ 6 Toluene-d8 (Surr)	98	6.444	6.444	0.000	93	968053	20.0	20.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	96	356763	20.0	22.0	
9 Dichlorodifluoromethane	85	1.392	1.392	0.000	99	378228	20.0	24.0	
10 Chloromethane	50	1.581	1.581	0.000	99	574003	20.0	21.4	
11 Butadiene	54	1.640	1.640	0.000	92	447958	20.0	24.1	
12 Vinyl chloride	62	1.676	1.676	0.000	97	396312	20.0	21.0	
14 Bromomethane	94	1.924	1.924	0.000	90	219835	20.0	17.5	
15 Chloroethane	64	1.983	1.983	0.000	100	252809	20.0	18.4	
16 Dichlorofluoromethane	67	2.161	2.161	0.000	97	494284	20.0	17.2	
17 Trichlorofluoromethane	101	2.173	2.173	0.000	98	408900	20.0	18.5	
19 Ethyl ether	59	2.433	2.433	0.000	93	271870	20.0	17.7	
20 Acrolein	56	2.551	2.551	0.000	98	158797	100.0	120.1	
21 1,1-Dichloroethene	61	2.622	2.622	0.000	96	424349	20.0	20.9	
22 112TCTFE	101	2.658	2.658	0.000	94	250939	20.0	21.0	
23 Acetone	43	2.681	2.681	0.000	100	291468	40.0	45.3	
24 Iodomethane	142	2.764	2.764	0.000	98	386990	20.0	18.7	
25 Carbon disulfide	76	2.812	2.812	0.000	99	869157	20.0	21.3	
27 3-Chloro-1-propene	41	2.942	2.942	0.000	92	519102	20.0	22.8	
28 Methyl acetate	43	2.965	2.965	0.000	98	762365	40.0	49.2	
29 Methylene Chloride	49	3.048	3.048	0.000	96	392827	20.0	21.2	
30 2-Methyl-2-propanol	59	3.166	3.166	0.000	100	520517	200.0	271.4	
31 Acrylonitrile	53	3.273	3.273	0.000	99	1750668	200.0	218.2	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	98	418786	20.0	21.5	
33 Methyl tert-butyl ether	73	3.285	3.285	0.000	97	873988	20.0	19.5	
34 Hexane	57	3.510	3.510	0.000	93	494058	20.0	22.9	
35 1,1-Dichloroethane	63	3.640	3.640	0.000	96	529279	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.687	3.687	0.000	97	687790	20.0	18.8	
40 2,2-Dichloropropane	77	4.137	4.125	0.012	62	334528	20.0	18.8	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	82	307524	20.0	16.9	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	100	127314	40.0	39.9	
46 Chlorobromomethane	49	4.326	4.326	0.000	96	268900	20.0	18.2	
47 Tetrahydrofuran	42	4.373	4.373	0.000	90	598229	40.0	73.5	
48 Chloroform	83	4.397	4.397	0.000	94	460581	20.0	17.9	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	396275	20.0	19.4	
50 Cyclohexane	84	4.598	4.598	0.000	92	492172	20.0	20.4	
51 1,1-Dichloropropene	75	4.681	4.681	0.000	94	420057	20.0	20.2	
52 Carbon tetrachloride	117	4.693	4.693	0.000	77	325415	20.0	19.6	
53 Isobutyl alcohol	41	4.788	4.788	0.000	95	519295	500.0	637.4	
54 Benzene	78	4.859	4.859	0.000	96	1207865	20.0	19.5	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	96	366137	20.0	18.2	
57 n-Heptane	57	5.072	5.072	0.000	93	236603	20.0	21.6	
59 Trichloroethene	130	5.403	5.403	0.000	97	281658	20.0	20.1	
61 Methylcyclohexane	83	5.569	5.569	0.000	93	533256	20.0	21.7	
62 1,2-Dichloropropane	63	5.592	5.592	0.000	91	282800	20.0	21.1	
64 Dibromomethane	174	5.699	5.699	0.000	94	175978	20.0	18.5	
65 1,4-Dioxane	88	5.711	5.711	0.000	95	86323	400.0	494.2	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	329284	20.0	19.7	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	441481	40.0	43.8	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	445581	20.0	21.0	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	96	937520	40.0	42.8	
71 Toluene	91	6.503	6.503	0.000	99	1164706	20.0	20.1	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	94	396246	20.0	21.1	
74 Ethyl methacrylate	69	6.776	6.776	0.000	91	421851	20.0	22.2	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	223572	20.0	19.7	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	282552	20.0	20.3	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	436938	20.0	20.5	
78 2-Hexanone	43	7.083	7.083	0.000	97	697681	40.0	45.8	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	223142	20.0	20.0	
81 Ethylene Dibromide	107	7.332	7.332	0.000	98	237048	20.0	20.2	
83 Chlorobenzene	112	7.781	7.781	0.000	94	696669	20.0	20.5	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	235515	20.0	20.3	
85 Ethylbenzene	106	7.876	7.876	0.000	99	401685	20.0	21.5	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	98	498674	20.0	21.6	
87 o-Xylene	106	8.361	8.361	0.000	97	490003	20.0	20.6	
88 Styrene	104	8.373	8.373	0.000	96	813819	20.0	21.3	
89 Bromoform	173	8.550	8.550	0.000	97	161593	20.0	21.0	
90 Isopropylbenzene	105	8.704	8.704	0.000	95	1281999	20.0	21.5	
92 Bromobenzene	156	9.000	9.000	0.000	93	287627	20.0	20.4	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	377838	20.0	20.9	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	86	129504	20.0	20.8	
95 trans-1,4-Dichloro-2-butene	53	9.047	9.047	0.000	91	97239	20.0	18.4	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	341729	20.0	22.2	
97 2-Chlorotoluene	126	9.189	9.189	0.000	97	281690	20.0	20.7	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	997725	20.0	22.0	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	289262	20.0	20.8	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	873508	20.0	22.0	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	999515	20.0	21.0	
105 sec-Butylbenzene	105	9.793	9.793	0.000	95	1242687	20.0	21.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	539992	20.0	20.1	
107 4-Isopropyltoluene	119	9.935	9.935	0.000	97	1058097	20.0	22.1	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	550350	20.0	19.8	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	900337	20.0	22.4	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	533985	20.0	20.1	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	86	99500	20.0	23.6	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.000	94	330024	20.0	22.5	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	119307	20.0	21.3	
117 Naphthalene	128	12.195	12.195	0.000	97	1132710	20.0	23.3	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	96	310313	20.0	23.0	
S 124 Trihalomethanes, Total	1				0		80.0	78.5	
S 125 Total BTEX	1				0		100.0	103.3	
S 128 Xylenes, Total	106				0		40.0	42.2	

Reagents:

vmarolistdw_00357	Amount Added:	16.00	Units: uL	
vmrprimw_00399	Amount Added:	16.00	Units: uL	
vmrgas_00351	Amount Added:	16.00	Units: uL	
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

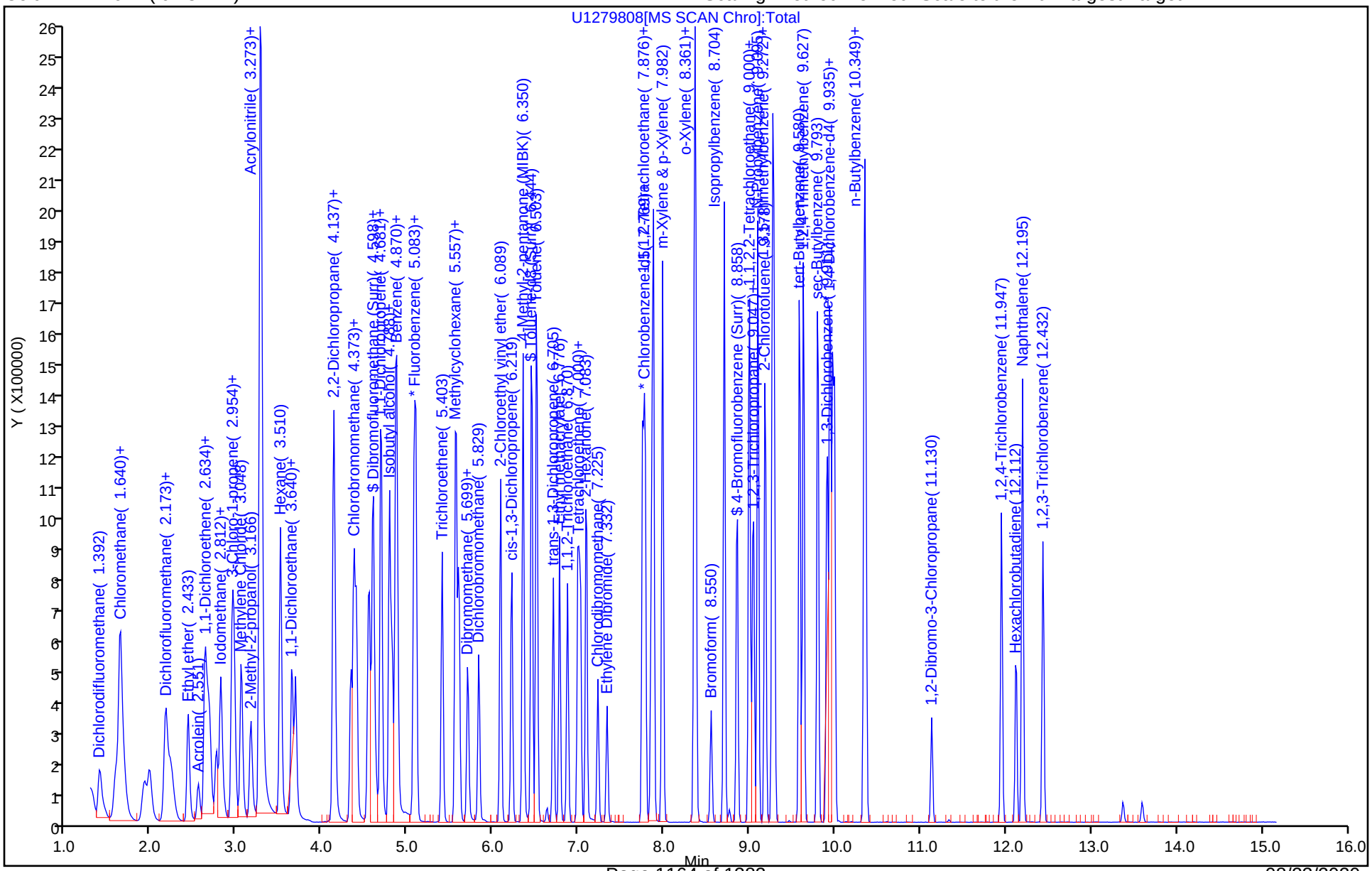
Report Date: 19-Aug-2020 16:39:20 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279808.D

Injection Date:	19-Aug-2020 16:09:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Jul-2018 15:37:29 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-014
Operator ID: 001904 Instrument ID: A3UX19
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:24 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	882991	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	707956	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	83	413254	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	84	243481	20.0	21.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.357	-0.012	96	255028	20.0	21.1	
$ 6 Toluene-d8 (Surr)	98	7.100	7.100	0.000	93	890649	20.0	20.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	90	336222	20.0	20.5	
25 Acetonitrile	41	3.329	3.329	0.000	100	288916	200.0	164.3	
36 Isopropyl ether	87	4.171	4.171	0.000	94	210236	20.0	20.6	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	86	354575	20.0	20.2	
38 Tert-butyl ethyl ether	59	4.492	4.491	0.001	97	657887	20.0	20.5	
42 Ethyl acetate	43	4.681	4.681	0.000	96	486199	40.0	36.6	
43 Propionitrile	54	4.681	4.681	0.000	59	348995	200.0	193.9	
44 Methacrylonitrile	41	4.824	4.823	0.001	91	1700375	200.0	210.7	
55 Tert-amyl methyl ether	73	5.500	5.499	0.001	91	691178	20.0	20.3	
57 n-Butanol	56	5.891	5.891	0.000	85	188747	500.0	456.8	
59 Ethyl acrylate	55	6.057	6.057	0.000	99	329918	20.0	20.2	
62 Methyl methacrylate	41	6.270	6.270	0.000	91	440657	40.0	40.6	
66 2-Nitropropane	41	6.638	6.638	0.000	98	128315	40.0	40.0	
78 n-Butyl acetate	43	7.883	7.883	0.000	99	386791	20.0	20.4	
81 1-Chlorohexane	91	8.488	8.488	0.000	74	315130	20.0	19.3	
90 Cyclohexanone	55	9.615	9.614	0.000	91	97723	200.0	202.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 Pentachloroethane	167	10.492	10.492	0.000	86	279031	40.0	39.0	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	86	994788	20.0	21.2	
107 Benzyl chloride	91	11.049	11.049	0.000	97	499238	20.0	18.8	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	97	414514	20.0	19.6	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	89	1147583	40.0	38.8	

Reagents:

VMFASA9W_00194	Amount Added: 16.00	Units: uL	
vm50ss_stk_00077	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00121	Amount Added: 0.00	Units:	Run Reagent
vm50is_stk_A_00001	Amount Added: 2.00	Units: uL	Run Reagent

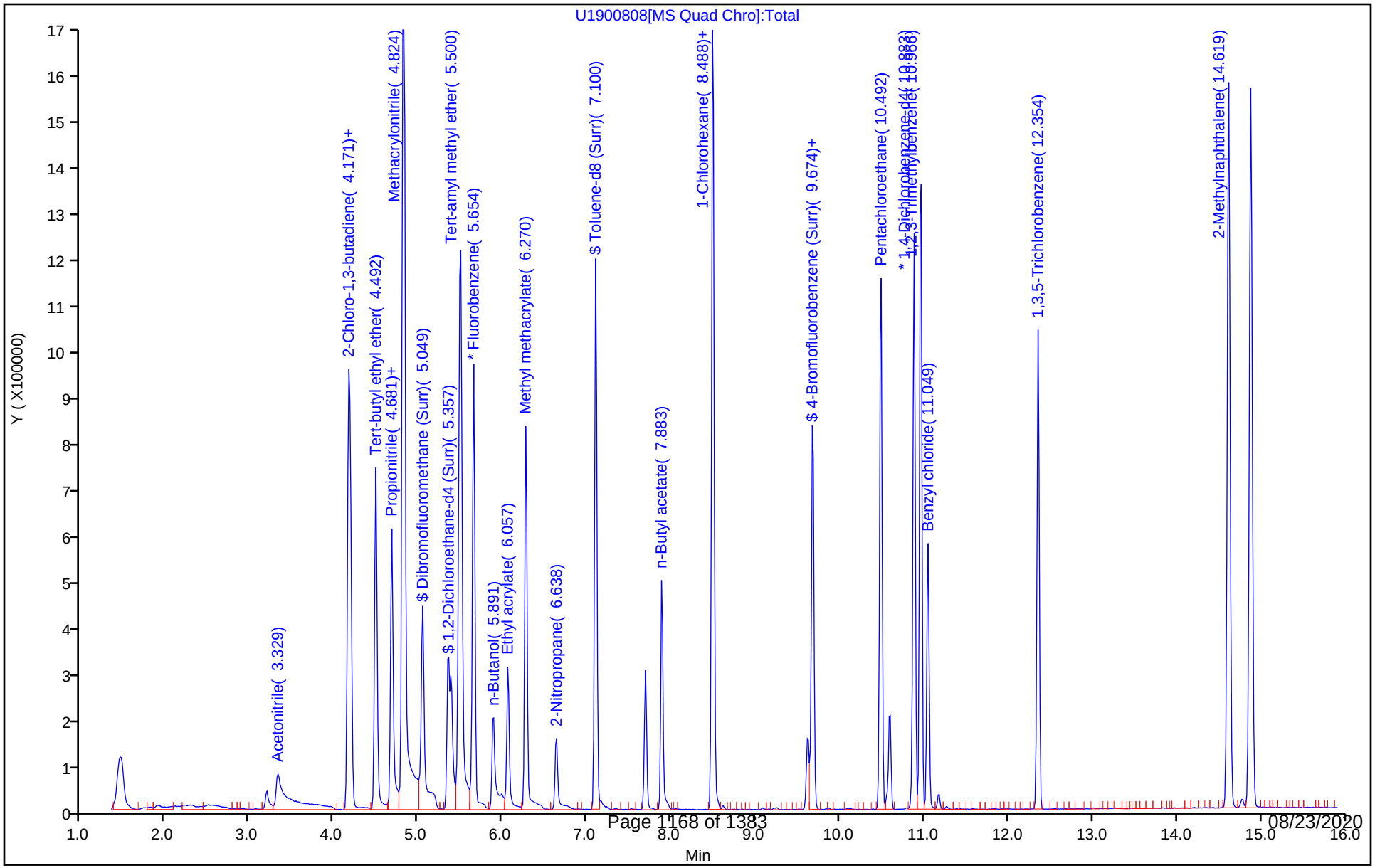
Report Date: 25-Jul-2018 16:30:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d

Injection Date:	25-Jul-2018 15:37:29	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	30.0
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

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Jul-2018 15:37:29 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-014
Operator ID: 001904 Instrument ID: A3UX19
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:24 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK026

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	882991	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	82	707956	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	83	413254	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	84	243481	20.0	21.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.345	5.357	-0.012	96	255028	20.0	21.1	
$ 6 Toluene-d8 (Surr)	98	7.100	7.100	0.000	93	890649	20.0	20.9	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	90	336222	20.0	20.5	
25 Acetonitrile	41	3.329	3.329	0.000	100	288916	200.0	164.3	
36 Isopropyl ether	87	4.171	4.171	0.000	94	210236	20.0	20.6	
37 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	86	354575	20.0	20.2	
38 Tert-butyl ethyl ether	59	4.492	4.491	0.001	97	657887	20.0	20.5	
42 Ethyl acetate	43	4.681	4.681	0.000	96	486199	40.0	36.6	
43 Propionitrile	54	4.681	4.681	0.000	59	348995	200.0	193.9	
44 Methacrylonitrile	41	4.824	4.823	0.001	91	1700375	200.0	210.7	
55 Tert-amyl methyl ether	73	5.500	5.499	0.001	91	691178	20.0	20.3	
57 n-Butanol	56	5.891	5.891	0.000	85	188747	500.0	456.8	
59 Ethyl acrylate	55	6.057	6.057	0.000	99	329918	20.0	20.2	
62 Methyl methacrylate	41	6.270	6.270	0.000	91	440657	40.0	40.6	
66 2-Nitropropane	41	6.638	6.638	0.000	98	128315	40.0	40.0	
78 n-Butyl acetate	43	7.883	7.883	0.000	99	386791	20.0	20.4	
81 1-Chlorohexane	91	8.488	8.488	0.000	74	315130	20.0	19.3	
90 Cyclohexanone	55	9.615	9.614	0.000	91	97723	200.0	202.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 Pentachloroethane	167	10.492	10.492	0.000	86	279031	40.0	39.0	
106 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	86	994788	20.0	21.2	
107 Benzyl chloride	91	11.049	11.049	0.000	97	499238	20.0	18.8	
111 1,3,5-Trichlorobenzene	180	12.354	12.354	0.000	97	414514	20.0	19.6	
116 2-Methylnaphthalene	142	14.619	14.619	0.000	89	1147583	40.0	38.8	

Reagents:

VMFASA9W_00194	Amount Added: 16.00	Units: uL	
vm50ss_stk_00077	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00121	Amount Added: 0.00	Units:	Run Reagent
vm50is_stk_A_00001	Amount Added: 2.00	Units: uL	Run Reagent

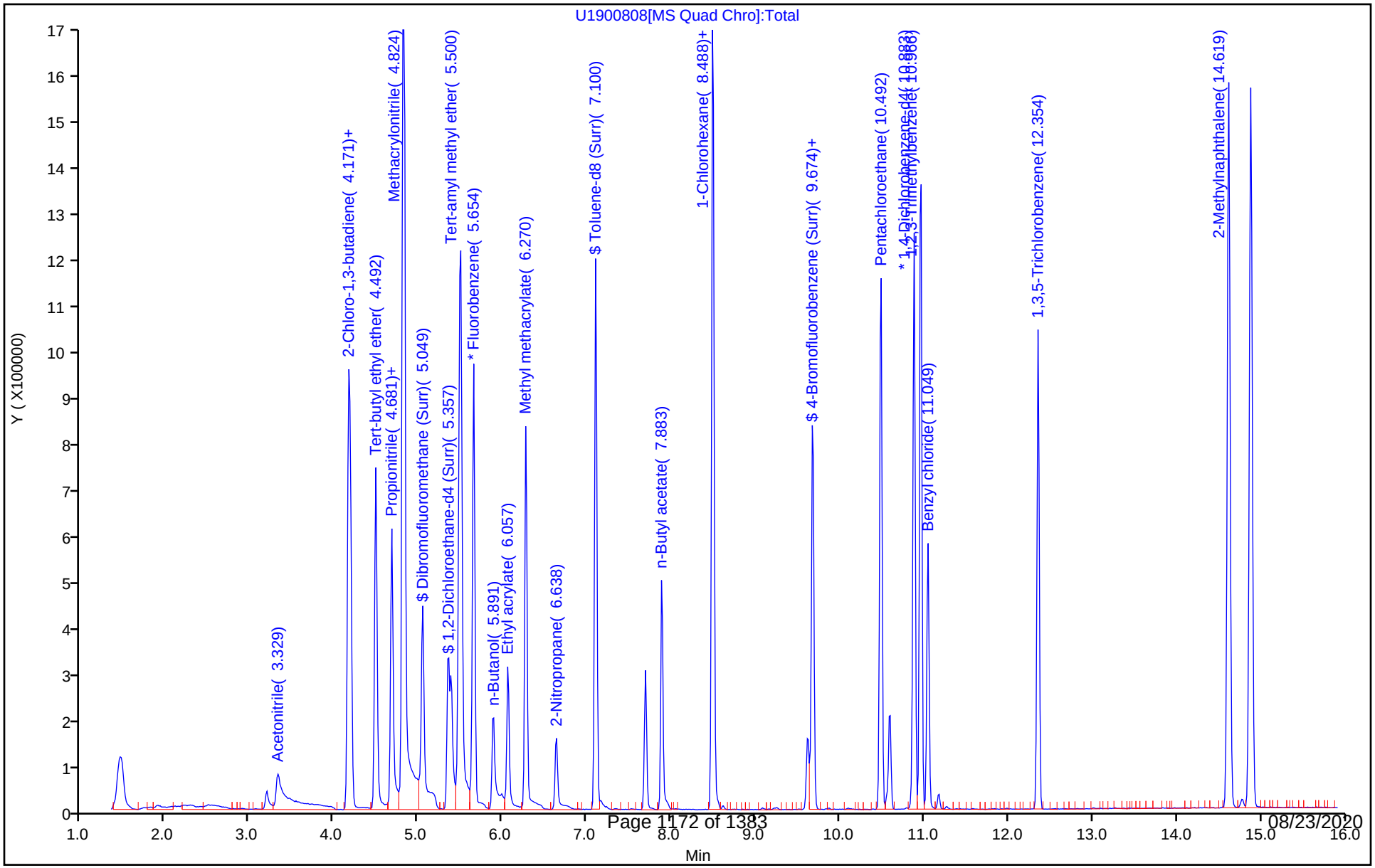
Report Date: 25-Jul-2018 16:30:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d

Injection Date:	25-Jul-2018 15:37:29	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	30.0
1,1-Dichloroethene	Ave	0.3589	0.3889	0.1000	0.0217	0.0200	8.3	30.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	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	50.0
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	30.0
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	30.0
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	50.0
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3230	0.0500	0.0403	0.0400	0.8	50.0
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	50.0
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

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	50.0
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

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901330.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Aug-2018 19:45:31 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:12:05 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	96	955207	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	83	765531	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.883	10.883	0.000	87	424750	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	111	5.049	5.049	0.000	59	264542	20.0	20.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.357	5.345	0.012	100	311954	20.0	21.1	
$ 6 Toluene-d8 (Surr)	98	7.100	7.101	0.000	86	947747	20.0	20.6	
$ 7 4-Bromofluorobenzene (Surr	95	9.674	9.674	0.000	89	364329	20.0	21.1	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	88	278240	20.0	15.1	
10 Chloromethane	50	1.823	1.812	0.011	78	238040	20.0	17.3	
12 Butadiene	54	1.906	1.906	0.000	87	236605	20.0	17.2	
11 Vinyl chloride	62	1.930	1.918	0.012	82	274549	20.0	19.3	
13 Bromomethane	94	2.227	2.227	0.000	92	208903	20.0	18.7	
14 Chloroethane	64	2.298	2.298	0.000	95	171871	20.0	19.5	
15 Dichlorofluoromethane	67	2.511	2.499	0.012	83	454821	20.0	20.8	
16 Trichlorofluoromethane	101	2.582	2.582	0.000	88	483563	20.0	20.3	
17 Ethyl ether	59	2.808	2.808	0.000	90	184629	20.0	21.5	
18 Acrolein	56	2.926	2.926	0.000	94	172494	100.0	81.2	
21 1,1-Dichloroethene	61	3.045	3.045	0.000	89	371471	20.0	21.7	
20 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.057	0.000	81	272453	20.0	22.2	
22 Acetone	43	3.068	3.069	-0.001	72	139402	40.0	37.2	
23 Iodomethane	142	3.199	3.199	0.000	99	461057	20.0	20.7	
24 Carbon disulfide	76	3.258	3.258	0.000	99	718482	20.0	20.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
26 3-Chloro-1-propene	41	3.365	3.365	0.000	74	344875	20.0	20.4	
27 Methyl acetate	43	3.377	3.377	0.000	96	420737	40.0	37.8	
28 Methylene Chloride	49	3.484	3.495	-0.011	55	271908	20.0	20.0	
29 2-Methyl-2-propanol	59	3.578	3.567	0.011	87	269854	200.0	208.6	
30 Acrylonitrile	53	3.697	3.685	0.012	98	973795	200.0	202.8	
32 trans-1,2-Dichloroethene	61	3.733	3.721	0.012	68	339431	20.0	21.0	
31 Methyl tert-butyl ether	73	3.733	3.733	0.000	89	674668	20.0	20.4	
33 Hexane	57	3.982	3.982	0.000	92	369879	20.0	22.0	
34 1,1-Dichloroethane	63	4.112	4.112	0.000	85	398379	20.0	20.6	
35 Vinyl acetate	43	4.148	4.148	0.000	97	485201	20.0	21.9	
40 cis-1,2-Dichloroethene	96	4.634	4.622	0.012	68	273831	20.0	19.8	
41 2-Butanone (MEK)	72	4.634	4.634	0.000	92	88581	40.0	39.3	
39 2,2-Dichloropropane	77	4.634	4.634	0.000	65	257071	20.0	22.1	
45 Chlorobromomethane	49	4.835	4.836	-0.001	70	180641	20.0	19.4	
46 Tetrahydrofuran	42	4.883	4.883	0.000	83	206721	40.0	41.8	
47 Chloroform	83	4.907	4.907	0.000	71	435869	20.0	20.6	
48 1,1,1-Trichloroethane	97	5.084	5.085	-0.001	90	429620	20.0	21.6	
49 Cyclohexane	84	5.144	5.144	0.000	86	393450	20.0	21.6	
50 1,1-Dichloropropene	75	5.227	5.227	0.000	90	350261	20.0	20.8	
51 Carbon tetrachloride	117	5.239	5.239	0.000	70	405050	20.0	21.1	
52 Isobutyl alcohol	41	5.298	5.298	0.000	83	266481	500.0	508.1	
54 1,2-Dichloroethane	62	5.416	5.417	-0.001	50	344294	20.0	20.0	
53 Benzene	78	5.416	5.417	-0.001	94	927804	20.0	20.4	
56 n-Heptane	57	5.642	5.642	0.000	82	219666	20.0	21.3	
58 Trichloroethene	130	5.986	5.986	0.000	92	305241	20.0	20.2	
60 Methylcyclohexane	83	6.175	6.176	-0.001	87	454812	20.0	20.7	
61 1,2-Dichloropropane	63	6.187	6.187	0.000	80	220275	20.0	20.9	
63 Dibromomethane	174	6.294	6.294	0.000	89	209471	20.0	19.3	
64 1,4-Dioxane	88	6.306	6.306	0.000	35	54068	400.0	473.8	
65 Dichlorobromomethane	83	6.436	6.436	0.000	93	333796	20.0	20.1	
67 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	93	174029	20.0	20.6	
68 cis-1,3-Dichloropropene	75	6.840	6.840	0.000	89	387819	20.0	21.0	
69 4-Methyl-2-pentanone (MIBK	43	6.982	6.982	0.000	83	617114	40.0	40.3	
70 Toluene	91	7.172	7.172	0.000	94	1042380	20.0	20.1	
71 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	85	353136	20.0	19.1	
72 Ethyl methacrylate	69	7.432	7.433	-0.001	89	339271	20.0	20.4	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	86	222400	20.0	20.4	
75 Tetrachloroethene	166	7.693	7.693	0.000	92	340390	20.0	20.6	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	90	362713	20.0	19.7	
77 2-Hexanone	43	7.765	7.765	-0.001	79	490171	40.0	40.7	
79 Chlorodibromomethane	129	7.931	7.919	0.012	88	278002	20.0	20.3	
80 Ethylene Dibromide	107	8.049	8.049	0.000	99	247260	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
82 Chlorobenzene	112	8.523	8.524	-0.001	92	706649	20.0	20.0	
83 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	87	265224	20.0	20.8	
84 Ethylbenzene	106	8.630	8.630	0.000	98	379588	20.0	20.5	
85 m-Xylene & p-Xylene	106	8.749	8.749	0.000	100	467728	20.0	20.7	
86 o-Xylene	106	9.152	9.152	0.000	88	441586	20.0	20.6	
87 Styrene	104	9.164	9.164	0.000	93	742653	20.0	20.2	
88 Bromoform	173	9.354	9.354	0.000	98	223782	20.0	19.9	
89 Isopropylbenzene	105	9.520	9.520	0.000	96	1211475	20.0	21.1	
91 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	88	329964	20.0	20.2	
92 Bromobenzene	156	9.840	9.840	0.000	89	320488	20.0	19.6	
93 1,2,3-Trichloropropane	110	9.863	9.864	-0.001	69	127830	20.0	20.6	
94 trans-1,4-Dichloro-2-buten	53	9.875	9.875	0.000	61	118291	20.0	20.3	
95 N-Propylbenzene	120	9.946	9.947	-0.001	96	339730	20.0	20.7	
96 2-Chlorotoluene	126	10.041	10.041	0.000	97	279994	20.0	20.2	
97 1,3,5-Trimethylbenzene	105	10.124	10.124	0.000	95	978383	20.0	20.7	
98 4-Chlorotoluene	126	10.148	10.148	0.000	98	300639	20.0	20.0	
99 tert-Butylbenzene	119	10.468	10.468	0.000	78	935547	20.0	20.9	
101 1,2,4-Trimethylbenzene	105	10.516	10.516	0.000	71	967584	20.0	20.2	
102 sec-Butylbenzene	105	10.694	10.694	0.000	93	1277861	20.0	21.2	
103 1,3-Dichlorobenzene	146	10.812	10.812	0.000	84	581709	20.0	19.4	
104 4-Isopropyltoluene	119	10.848	10.848	0.000	91	1116328	20.0	21.1	
105 1,4-Dichlorobenzene	146	10.907	10.907	0.000	92	592339	20.0	19.1	
108 n-Butylbenzene	91	11.287	11.287	0.000	97	897771	20.0	20.6	
109 1,2-Dichlorobenzene	146	11.310	11.298	0.012	98	533790	20.0	19.6	
110 1,2-Dibromo-3-Chloropropan	157	12.128	12.129	-0.001	89	102428	20.0	19.7	
112 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	92	339973	20.0	18.7	
113 Hexachlorobutadiene	225	13.208	13.208	0.000	88	185743	20.0	19.9	
114 Naphthalene	128	13.279	13.279	0.000	96	960764	20.0	19.1	
115 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	93	309386	20.0	19.0	
S 164 Total BTEX	1				0		100.0	102.4	
S 127 Trihalomethanes, Total	1				0		80.0	80.9	
S 126 Xylenes, Total	106				0		40.0	41.4	

Reagents:

vmfasgw_00271	Amount Added:	16.00	Units: uL	
vmfasaw_00246	Amount Added:	16.00	Units: uL	
vmfaspw_00264	Amount Added:	16.00	Units: uL	
vm50ss_stk_00077	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00123	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00001	Amount Added:	2.00	Units: uL	Run Reagent

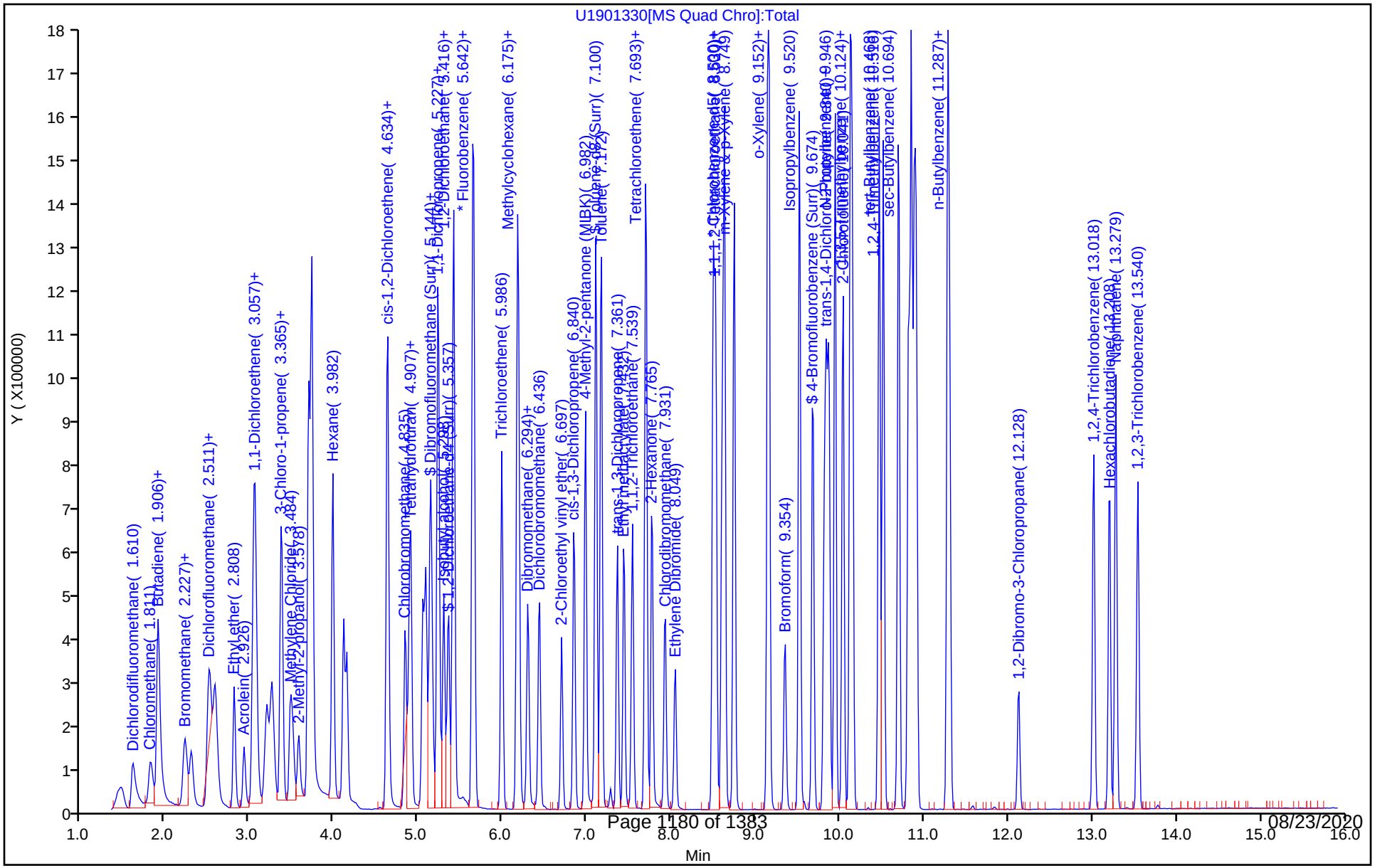
Report Date: 27-Aug-2018 21:12:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901330.d

Injection Date:	27-Aug-2018 19:45:31	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447281/3 Calibration Date: 08/14/2020 17:44

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: U1916360.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		0.0426		0.213	0.200	6.6	20.0
Diisopropyl ether	Ave	0.2313	0.2103		0.0182	0.0200	-9.1	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.3946		0.0198	0.0200	-0.8	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6430		0.0177	0.0200	-11.4	20.0
Ethyl acetate	Ave	0.3007	0.3152		0.0419	0.0400	4.8	20.0
Propionitrile	Ave	0.0408	0.0560		0.275	0.200	37.4*	20.0
Methacrylonitrile	Ave	0.1828	0.1973		0.216	0.200	7.9	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.6807		0.0177	0.0200	-11.6	20.0
n-Butanol	Ave	0.0094	0.0141		0.754	0.500	50.7*	20.0
Ethyl acrylate	Ave	0.3703	0.3759		0.0203	0.0200	1.5	20.0
Methyl methacrylate	Ave	0.2459	0.2386		0.0388	0.0400	-3.0	20.0
2-Nitropropane	Ave	0.0726	0.0849		0.0468	0.0400	17.0	20.0
n-Butyl acetate	Ave	0.5364	0.5513		0.0206	0.0200	2.8	20.0
1-Chlorohexane	Ave	0.4610	0.4488		0.0195	0.0200	-2.6	20.0
Cyclohexanone	Ave	0.0137	0.0171		0.249	0.200	24.7*	20.0
Pentachloroethane	Ave	0.3462	0.4016		0.0464	0.0400	16.0	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.347		0.0206	0.0200	3.1	20.0
Benzyl chloride	Ave	1.286	1.676		0.0261	0.0200	30.3*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8644		0.0169	0.0200	-15.4	20.0
2-Methylnaphthalene	Ave	1.433	1.187		0.0331	0.0400	-17.1	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916360.d
Lims ID: CCV A9
Client ID:
Sample Type: CCV
Inject. Date: 14-Aug-2020 17:44:02 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub13

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 18:37:38 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 18:37:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.654	5.654	0.000	99	995929	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	734440	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	374225	20.0	20.0	
26 Acetonitrile	41	3.329	3.329	0.000	99	424669	200.0	213.2	
37 Isopropyl ether	87	4.171	4.171	0.000	92	209398	20.0	18.2	
38 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	91	392946	20.0	19.8	
39 Tert-butyl ethyl ether	59	4.491	4.491	0.000	96	640370	20.0	17.7	
44 Ethyl acetate	43	4.681	4.681	0.000	99	627796	40.0	41.9	
43 Propionitrile	54	4.681	4.681	0.000	78	557897	200.0	274.9	
45 Methacrylonitrile	41	4.824	4.824	0.000	91	1965403	200.0	215.9	
56 Tert-amyl methyl ether	73	5.511	5.511	0.000	97	677955	20.0	17.7	
58 n-Butanol	56	5.891	5.891	0.000	87	351175	500.0	753.5	
60 Ethyl acrylate	55	6.069	6.069	0.000	99	374362	20.0	20.3	
63 Methyl methacrylate	41	6.282	6.282	0.000	88	475284	40.0	38.8	
67 2-Nitropropane	41	6.638	6.638	0.000	98	169175	40.0	46.8	
78 n-Butyl acetate	43	7.895	7.895	0.000	98	404864	20.0	20.6	
82 1-Chlorohexane	91	8.500	8.500	0.000	97	329612	20.0	19.5	
91 Cyclohexanone	55	9.626	9.626	0.000	92	125197	200.0	249.4	
104 Pentachloroethane	167	10.492	10.492	0.000	92	300571	40.0	46.4	
110 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	98	878269	20.0	20.6	
111 Benzyl chloride	91	11.049	11.049	0.000	99	627281	20.0	26.1	
115 1,3,5-Trichlorobenzene	180	12.366	12.366	0.000	98	323495	20.0	16.9	
120 2-Methylnaphthalene	142	14.631	14.631	0.000	92	888538	40.0	33.1	

Reagents:

vm50is_stk_A_00007 Amount Added: 2.00 Units: uL
vmra9w_00356 Amount Added: 16.00 Units: uL

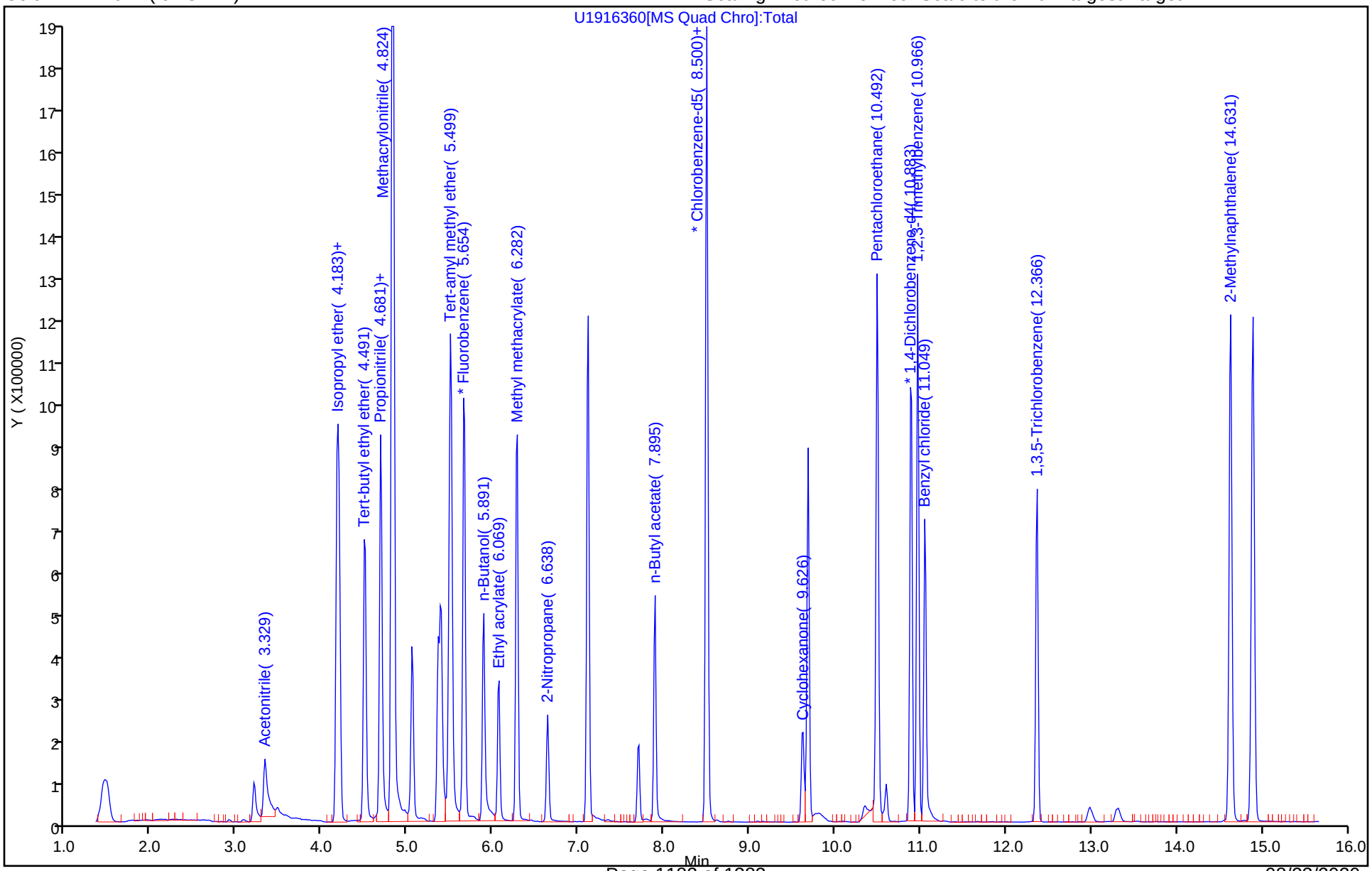
Report Date: 14-Aug-2020 18:37:39 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916360.d

Injection Date:	14-Aug-2020 17:44:02	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	CCV A9			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447281/4 Calibration Date: 08/14/2020 18:06

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: U1916361.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	0.3135	0.1000	0.0163	0.0200	-18.6	20.0
Chloromethane	Ave	0.2883	0.2877	0.1000	0.0200	0.0200	-0.2	20.0
Vinyl chloride	Ave	0.2980	0.3024	0.1000	0.0203	0.0200	1.5	20.0
Butadiene	Ave	0.2887	0.2846		0.0197	0.0200	-1.4	20.0
Bromomethane	Ave	0.2335	0.2074	0.0500	0.0178	0.0200	-11.2	20.0
Chloroethane	Ave	0.1848	0.1906	0.0500	0.0206	0.0200	3.1	20.0
Dichlorofluoromethane	Ave	0.4581	0.4300		0.0188	0.0200	-6.1	20.0
Trichlorofluoromethane	Ave	0.4984	0.4033	0.1000	0.0162	0.0200	-19.1	20.0
Ethyl ether	Ave	0.1800	0.2018		0.0224	0.0200	12.1	20.0
Acrolein	Ave	0.0445	0.0244		0.0549	0.100	-45.1*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3480	0.1000	0.0194	0.0200	-3.1	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2567	0.2616	0.0500	0.0204	0.0200	1.9	20.0
Acetone	Ave	0.0784	0.1004	0.0100	0.0512	0.0400	28.1	50.0
Iodomethane	Ave	0.4655	0.4055		0.0174	0.0200	-12.9	20.0
Carbon disulfide	Ave	0.7515	0.7289	0.1000	0.0194	0.0200	-3.0	20.0
3-Chloro-1-propene	Ave	0.3541	0.3358		0.0190	0.0200	-5.2	20.0
Methyl acetate	Ave	0.2328	0.2608	0.1000	0.0448	0.0400	12.0	50.0
Methylene Chloride	Ave	0.2846	0.2912	0.1000	0.0205	0.0200	2.3	50.0
tert-Butyl alcohol	Ave	0.0271	0.0356		0.263	0.200	31.3*	20.0
Acrylonitrile	Ave	0.1006	0.1264		0.251	0.200	25.7*	20.0
Methyl tert-butyl ether	Ave	0.6938	0.6837	0.1000	0.0197	0.0200	-1.5	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3392	0.1000	0.0200	0.0200	0.2	20.0
Hexane	Ave	0.3524	0.3673		0.0208	0.0200	4.2	20.0
1,1-Dichloroethane	Ave	0.4048	0.4222	0.2000	0.0209	0.0200	4.3	20.0
Vinyl acetate	Ave	0.4639	0.5017		0.0216	0.0200	8.2	20.0
2,2-Dichloropropane	Ave	0.2438	0.2689		0.0221	0.0200	10.3	20.0
2-Butanone	Ave	0.0472	0.0507	0.0100	0.0429	0.0400	7.3	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2797	0.1000	0.0194	0.0200	-3.2	20.0
Bromochloromethane	Ave	0.1945	0.1974		0.0203	0.0200	1.5	20.0
Tetrahydrofuran	Lin1		0.1160		0.0450	0.0400	12.6	20.0
Chloroform	Ave	0.4433	0.4440	0.2000	0.0200	0.0200	0.2	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3805	0.1000	0.0182	0.0200	-8.8	20.0
Cyclohexane	Ave	0.3819	0.3965	0.1000	0.0208	0.0200	3.8	20.0
1,1-Dichloropropene	Ave	0.3519	0.3613		0.0205	0.0200	2.7	20.0
Carbon tetrachloride	Ave	0.4023	0.3531	0.1000	0.0176	0.0200	-12.2	20.0
Isobutyl alcohol	Ave	0.0110	0.0134		0.610	0.500	22.0*	20.0
Benzene	Ave	0.9518	1.002	0.5000	0.0211	0.0200	5.3	20.0
1,2-Dichloroethane	Ave	0.3600	0.3277	0.1000	0.0182	0.0200	-9.0	20.0
n-Heptane	Lin1		0.1815		0.0160	0.0200	-19.8	20.0
Trichloroethene	Ave	0.3160	0.2860	0.1500	0.0181	0.0200	-9.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447281/4 Calibration Date: 08/14/2020 18:06

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: U1916361.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	0.4301	0.1000	0.0187	0.0200	-6.3	20.0
1,2-Dichloropropane	Ave	0.2208	0.2347	0.1000	0.0213	0.0200	6.3	20.0
1,4-Dioxane	Ave	0.0024	0.0042		0.701	0.400	75.3*	50.0
Dibromomethane	Ave	0.2271	0.1806		0.0159	0.0200	-20.4*	20.0
Bromodichloromethane	Ave	0.3479	0.3163	0.1500	0.0182	0.0200	-9.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1745		0.0394	0.0400	-1.4	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3784	0.1500	0.0196	0.0200	-2.1	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3283	0.0500	0.0410	0.0400	2.5	50.0
Toluene	Ave	1.352	1.454	0.4000	0.0215	0.0200	7.6	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4716	0.1000	0.0196	0.0200	-2.1	20.0
Ethyl methacrylate	Ave	0.4344	0.4589		0.0211	0.0200	5.6	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3021	0.1000	0.0213	0.0200	6.3	20.0
1,3-Dichloropropane	Ave	0.4802	0.5227		0.0218	0.0200	8.8	20.0
Tetrachloroethene	Ave	0.4313	0.3951	0.1500	0.0183	0.0200	-8.4	20.0
2-Hexanone	Ave	0.3149	0.3426	0.0500	0.0435	0.0400	8.8	50.0
Dibromochloromethane	Ave	0.3583	0.3432		0.0192	0.0200	-4.2	20.0
1,2-Dibromoethane	Ave	0.3346	0.3286		0.0196	0.0200	-1.8	20.0
Chlorobenzene	Ave	0.9253	0.9305	0.3000	0.0201	0.0200	0.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3360		0.0201	0.0200	0.7	20.0
Ethylbenzene	Ave	0.4836	0.4883		0.0202	0.0200	1.0	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6102		0.0207	0.0200	3.6	20.0
o-Xylene	Ave	0.5597	0.5945		0.0212	0.0200	6.2	20.0
Styrene	Ave	0.9588	0.9903	0.3000	0.0207	0.0200	3.3	20.0
Bromoform	Ave	0.2933	0.2561	0.1000	0.0175	0.0200	-12.7	20.0
Isopropylbenzene	Ave	1.503	1.537	0.1000	0.0205	0.0200	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9247	0.3000	0.0240	0.0200	20.0	20.0
Bromobenzene	Ave	0.7690	0.7328		0.0191	0.0200	-4.7	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3065		0.0210	0.0200	4.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2658		0.0194	0.0200	-2.9	20.0
n-Propylbenzene	Ave	0.7729	0.8074		0.0209	0.0200	4.5	20.0
2-Chlorotoluene	Ave	0.6541	0.6909		0.0211	0.0200	5.6	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.331		0.0210	0.0200	4.8	20.0
4-Chlorotoluene	Ave	0.7072	0.7190		0.0203	0.0200	1.7	20.0
tert-Butylbenzene	Ave	2.113	2.013		0.0191	0.0200	-4.7	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.355		0.0209	0.0200	4.4	20.0
sec-Butylbenzene	Ave	2.845	2.898		0.0204	0.0200	1.9	20.0
1,3-Dichlorobenzene	Ave	1.412	1.360	0.6000	0.0193	0.0200	-3.7	20.0
p-Isopropyltoluene	Ave	2.492	2.459		0.0197	0.0200	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.459	1.367	0.5000	0.0187	0.0200	-6.3	20.0
n-Butylbenzene	Ave	2.050	2.039		0.0199	0.0200	-0.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.327	0.4000	0.0207	0.0200	3.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447281/4 Calibration Date: 08/14/2020 18:06

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: U1916361.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	0.2555	0.0500	0.0208	0.0200	4.2	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.6871	0.2000	0.0161	0.0200	-19.6	50.0
Hexachlorobutadiene	Ave	0.4392	0.2895		0.0132	0.0200	-34.1	50.0
Naphthalene	Ave	2.363	2.421		0.0205	0.0200	2.4	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.6832		0.0178	0.0200	-11.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2633		0.0196	0.0200	-2.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.2996		0.0194	0.0200	-3.1	20.0
Toluene-d8 (Surr)	Ave	1.199	1.298		0.0216	0.0200	8.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4698		0.0208	0.0200	4.1	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916361.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Aug-2020 18:06:39 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 18:40:09 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 18:40:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	1022055	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	752909	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	93	402555	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	269125	20.0	19.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	98	306246	20.0	19.4	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	977159	20.0	21.6	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	353737	20.0	20.8	
9 Dichlorodifluoromethane	85	1.598	1.598	0.000	99	320404	20.0	16.3	
10 Chloromethane	50	1.812	1.812	0.000	99	294066	20.0	20.0	
11 Butadiene	54	1.918	1.918	0.000	88	290830	20.0	19.7	
12 Vinyl chloride	62	1.907	1.907	0.000	98	309074	20.0	20.3	
13 Bromomethane	94	2.250	2.250	0.000	90	211943	20.0	17.8	
15 Chloroethane	64	2.310	2.310	0.000	99	194787	20.0	20.6	
16 Dichlorofluoromethane	67	2.523	2.523	0.000	97	439518	20.0	18.8	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	98	412182	20.0	16.2	
18 Ethyl ether	59	2.808	2.808	0.000	90	206283	20.0	22.4	
19 Acrolein	56	2.926	2.926	0.000	100	124715	100.0	54.9	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	355671	20.0	19.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.069	3.069	0.000	93	267366	20.0	20.4	
22 Acetone	43	3.081	3.081	0.000	100	205259	40.0	51.2	
24 Iodomethane	142	3.175	3.175	0.000	99	414403	20.0	17.4	
25 Carbon disulfide	76	3.247	3.247	0.000	100	745006	20.0	19.4	
27 3-Chloro-1-propene	41	3.365	3.365	0.000	90	343156	20.0	19.0	
28 Methyl acetate	43	3.389	3.389	0.000	97	533087	40.0	44.8	
29 Methylene Chloride	49	3.472	3.472	0.000	88	297593	20.0	20.5	
30 2-Methyl-2-propanol	59	3.579	3.579	0.000	98	363290	200.0	262.5	
31 Acrylonitrile	53	3.697	3.697	0.000	98	1291943	200.0	251.4	
32 trans-1,2-Dichloroethene	61	3.733	3.733	0.000	72	346678	20.0	20.0	
33 Methyl tert-butyl ether	73	3.733	3.733	0.000	94	698739	20.0	19.7	
34 Hexane	57	3.982	3.982	0.000	90	375397	20.0	20.8	
35 1,1-Dichloroethane	63	4.112	4.112	0.000	96	431554	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	4.148	4.148	0.000	97	512759	20.0	21.6	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	98	103604	40.0	42.9	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	80	285870	20.0	19.4	
42 2,2-Dichloropropane	77	4.634	4.634	0.000	73	274828	20.0	22.1	
46 Chlorobromomethane	49	4.847	4.847	0.000	90	201795	20.0	20.3	
47 Tetrahydrofuran	42	4.883	4.883	0.000	84	237070	40.0	45.0	
48 Chloroform	83	4.907	4.907	0.000	92	453815	20.0	20.0	
49 1,1,1-Trichloroethane	97	5.085	5.085	0.000	98	388875	20.0	18.2	
50 Cyclohexane	84	5.144	5.144	0.000	96	405274	20.0	20.8	
52 Carbon tetrachloride	117	5.239	5.239	0.000	97	360866	20.0	17.6	
51 1,1-Dichloropropene	75	5.227	5.227	0.000	98	369238	20.0	20.5	
53 Isobutyl alcohol	41	5.298	5.298	0.000	94	342362	500.0	610.0	
54 Benzene	78	5.417	5.417	0.000	95	1023909	20.0	21.1	
55 1,2-Dichloroethane	62	5.429	5.429	0.000	98	334887	20.0	18.2	
57 n-Heptane	57	5.642	5.642	0.000	89	185475	20.0	16.0	
59 Trichloroethene	130	5.998	5.998	0.000	97	292317	20.0	18.1	
61 Methylcyclohexane	83	6.176	6.176	0.000	90	439558	20.0	18.7	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	96	239890	20.0	21.3	
64 Dibromomethane	174	6.306	6.306	0.000	93	184625	20.0	15.9	
65 1,4-Dioxane	88	6.306	6.306	0.000	91	85631	400.0	701.3	
66 Dichlorobromomethane	83	6.437	6.437	0.000	100	323311	20.0	18.2	
68 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	92	356736	40.0	39.4	
69 cis-1,3-Dichloropropene	75	6.852	6.852	0.000	96	386767	20.0	19.6	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	96	670974	40.0	41.0	
71 Toluene	91	7.172	7.172	0.000	98	1094596	20.0	21.5	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	355084	20.0	19.6	
73 Ethyl methacrylate	69	7.445	7.445	0.000	88	345512	20.0	21.1	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	227440	20.0	21.3	
75 Tetrachloroethene	166	7.705	7.705	0.000	97	297457	20.0	18.3	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	393524	20.0	21.8	
77 2-Hexanone	43	7.777	7.777	0.000	95	515830	40.0	43.5	
79 Chlorodibromomethane	129	7.931	7.931	0.000	90	258398	20.0	19.2	
81 Ethylene Dibromide	107	8.049	8.049	0.000	98	247421	20.0	19.6	
83 Chlorobenzene	112	8.536	8.536	0.000	97	700610	20.0	20.1	
84 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	95	252981	20.0	20.1	
85 Ethylbenzene	106	8.642	8.642	0.000	98	367669	20.0	20.2	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	100	459407	20.0	20.7	
87 o-Xylene	106	9.152	9.152	0.000	94	447602	20.0	21.2	
88 Styrene	104	9.164	9.164	0.000	93	745638	20.0	20.7	
89 Bromoform	173	9.354	9.354	0.000	97	192798	20.0	17.5	
90 Isopropylbenzene	105	9.532	9.532	0.000	95	1157041	20.0	20.5	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	94	372235	20.0	24.0	
95 Bromobenzene	156	9.852	9.852	0.000	91	294972	20.0	19.1	
97 trans-1,4-Dichloro-2-butene	53	9.876	9.876	0.000	76	106995	20.0	19.4	
96 1,2,3-Trichloropropane	110	9.876	9.876	0.000	83	123380	20.0	21.0	
98 N-Propylbenzene	120	9.947	9.947	0.000	99	325011	20.0	20.9	
100 2-Chlorotoluene	126	10.042	10.042	0.000	97	278119	20.0	21.1	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	96	938446	20.0	21.0	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	289442	20.0	20.3	
103 tert-Butylbenzene	119	10.480	10.480	0.000	91	810375	20.0	19.1	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	96	948083	20.0	20.9	
106 sec-Butylbenzene	105	10.706	10.706	0.000	94	1166601	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	547673	20.0	19.3	
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	989918	20.0	19.7	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	550421	20.0	18.7	
112 n-Butylbenzene	91	11.287	11.287	0.000	98	820929	20.0	19.9	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	534256	20.0	20.7	
114 1,2-Dibromo-3-Chloropropane	157	12.129	12.129	0.000	88	102834	20.0	20.8	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	93	276610	20.0	16.1	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	116542	20.0	13.2	
118 Naphthalene	128	13.279	13.279	0.000	97	974485	20.0	20.5	
119 1,2,3-Trichlorobenzene	180	13.552	13.552	0.000	95	275035	20.0	17.8	
S 125 Trihalomethanes, Total	1				0		80.0	74.8	
S 124 Total BTEX	1				0		100.0	104.7	
S 128 Xylenes, Total	106				0		40.0	42.0	

Reagents:

vmarolistdw_00356	Amount Added: 16.00	Units: uL	
vmrprimw_00399	Amount Added: 16.00	Units: uL	
vmrgas_00350	Amount Added: 16.00	Units: uL	
vm50ss_stk_00085	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added: 0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added: 0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added: 2.00	Units: uL	Run Reagent

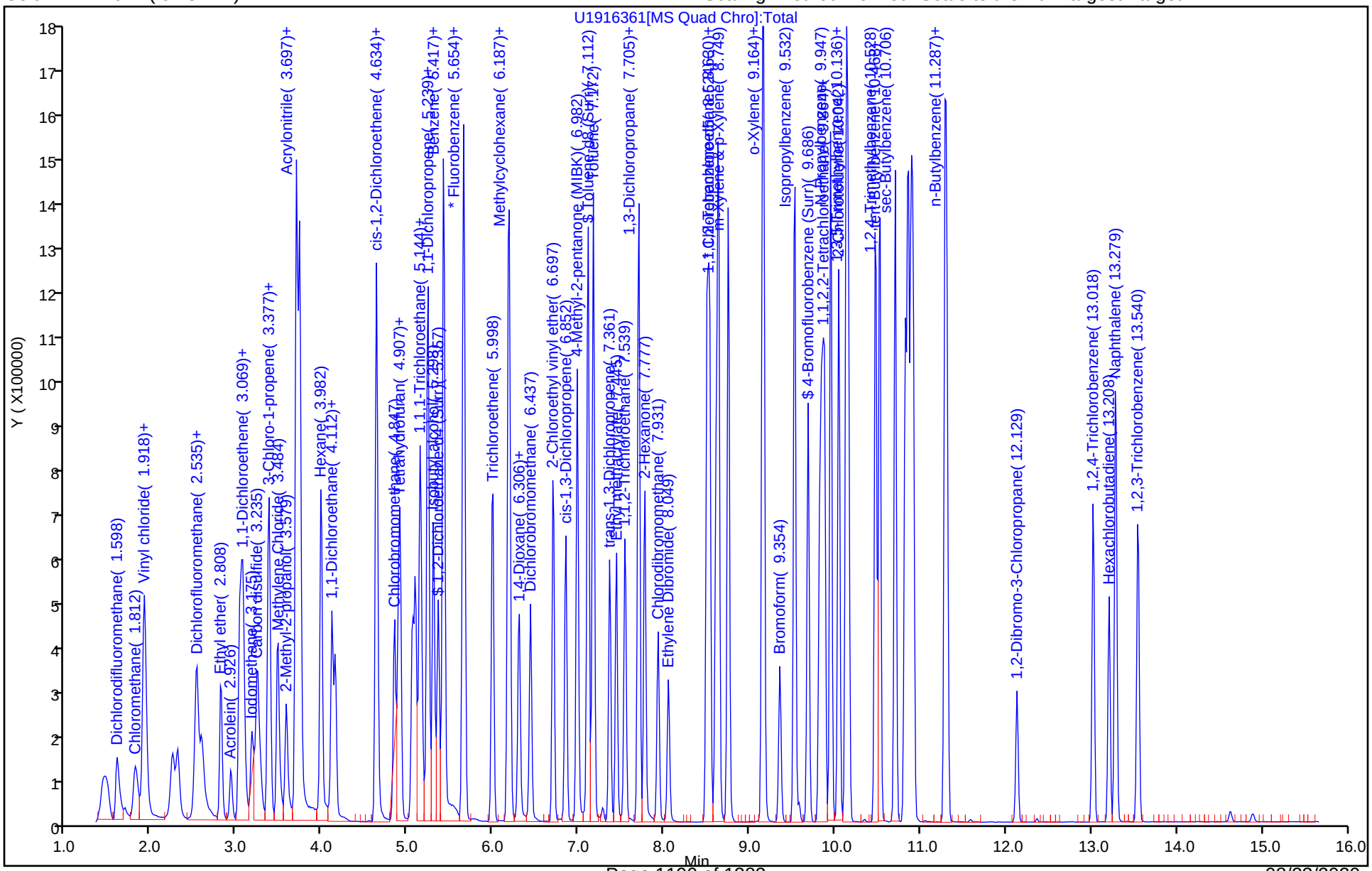
Report Date: 14-Aug-2020 18:40:11 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916361.d

Injection Date:	14-Aug-2020 18:06:39	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447506/3 Calibration Date: 08/17/2020 17:24

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: U1916390.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		0.0523		0.261	0.200	30.4*	20.0
Diisopropyl ether	Ave	0.2313	0.2112		0.0183	0.0200	-8.7	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.3958		0.0199	0.0200	-0.5	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6646		0.0183	0.0200	-8.4	20.0
Ethyl acetate	Ave	0.3007	0.3320		0.0442	0.0400	10.4	20.0
Propionitrile	Ave	0.0408	0.0616		0.302	0.200	51.1*	20.0
Methacrylonitrile	Ave	0.1828	0.2105		0.230	0.200	15.1	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.7067		0.0184	0.0200	-8.2	20.0
n-Butanol	Ave	0.0094	0.0156		0.835	0.500	67.1*	20.0
Ethyl acrylate	Ave	0.3703	0.3818		0.0206	0.0200	3.1	20.0
Methyl methacrylate	Ave	0.2459	0.2413		0.0393	0.0400	-1.9	20.0
2-Nitropropane	Ave	0.0726	0.0928		0.0512	0.0400	27.9*	20.0
n-Butyl acetate	Ave	0.5364	0.5706		0.0213	0.0200	6.4	20.0
1-Chlorohexane	Ave	0.4610	0.4572		0.0198	0.0200	-0.8	20.0
Cyclohexanone	Ave	0.0137	0.0191		0.280	0.200	40.0*	20.0
Pentachloroethane	Ave	0.3462	0.4358		0.0504	0.0400	25.9*	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.368		0.0208	0.0200	4.0	20.0
Benzyl chloride	Ave	1.286	1.759		0.0274	0.0200	36.8*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8512		0.0167	0.0200	-16.7	20.0
2-Methylnaphthalene	Ave	1.433	1.176		0.0328	0.0400	-17.9	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916390.d
Lims ID: CCV A9
Client ID:
Sample Type: CCV
Inject. Date: 17-Aug-2020 17:24:29 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub13

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 17:50:25 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 17:50:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	998191	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	736029	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	378319	20.0	20.0	
26 Acetonitrile	41	3.330	3.330	0.000	99	522195	200.0	260.9	
37 Isopropyl ether	87	4.171	4.171	0.000	92	210773	20.0	18.3	
38 2-Chloro-1,3-butadiene	53	4.195	4.195	0.000	91	395127	20.0	19.9	
39 Tert-butyl ethyl ether	59	4.492	4.492	0.000	96	663409	20.0	18.3	
44 Ethyl acetate	43	4.681	4.681	0.000	99	662772	40.0	44.2	
43 Propionitrile	54	4.681	4.681	0.000	84	614687	200.0	302.2	
45 Methacrylonitrile	41	4.824	4.824	0.000	91	2101060	200.0	230.3	
56 Tert-amyl methyl ether	73	5.512	5.512	0.000	99	705382	20.0	18.4	
58 n-Butanol	56	5.891	5.891	0.000	87	390163	500.0	835.3	
60 Ethyl acrylate	55	6.069	6.069	0.000	99	381136	20.0	20.6	
63 Methyl methacrylate	41	6.270	6.270	0.000	89	481799	40.0	39.3	
67 2-Nitropropane	41	6.638	6.638	0.000	99	185301	40.0	51.2	
78 n-Butyl acetate	43	7.895	7.895	0.000	97	419994	20.0	21.3	
82 1-Chlorohexane	91	8.500	8.500	0.000	97	336537	20.0	19.8	
91 Cyclohexanone	55	9.626	9.626	0.000	91	140820	200.0	279.9	
104 Pentachloroethane	167	10.492	10.492	0.000	92	329774	40.0	50.4	
110 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	98	895691	20.0	20.8	
111 Benzyl chloride	91	11.049	11.049	0.000	98	665513	20.0	27.4	
115 1,3,5-Trichlorobenzene	180	12.366	12.366	0.000	97	322012	20.0	16.7	
120 2-Methylnaphthalene	142	14.631	14.631	0.000	92	889672	40.0	32.8	

Reagents:

vm50is_stk_A_00007 Amount Added: 2.00 Units: uL
vmra9w_00357 Amount Added: 16.00 Units: uL

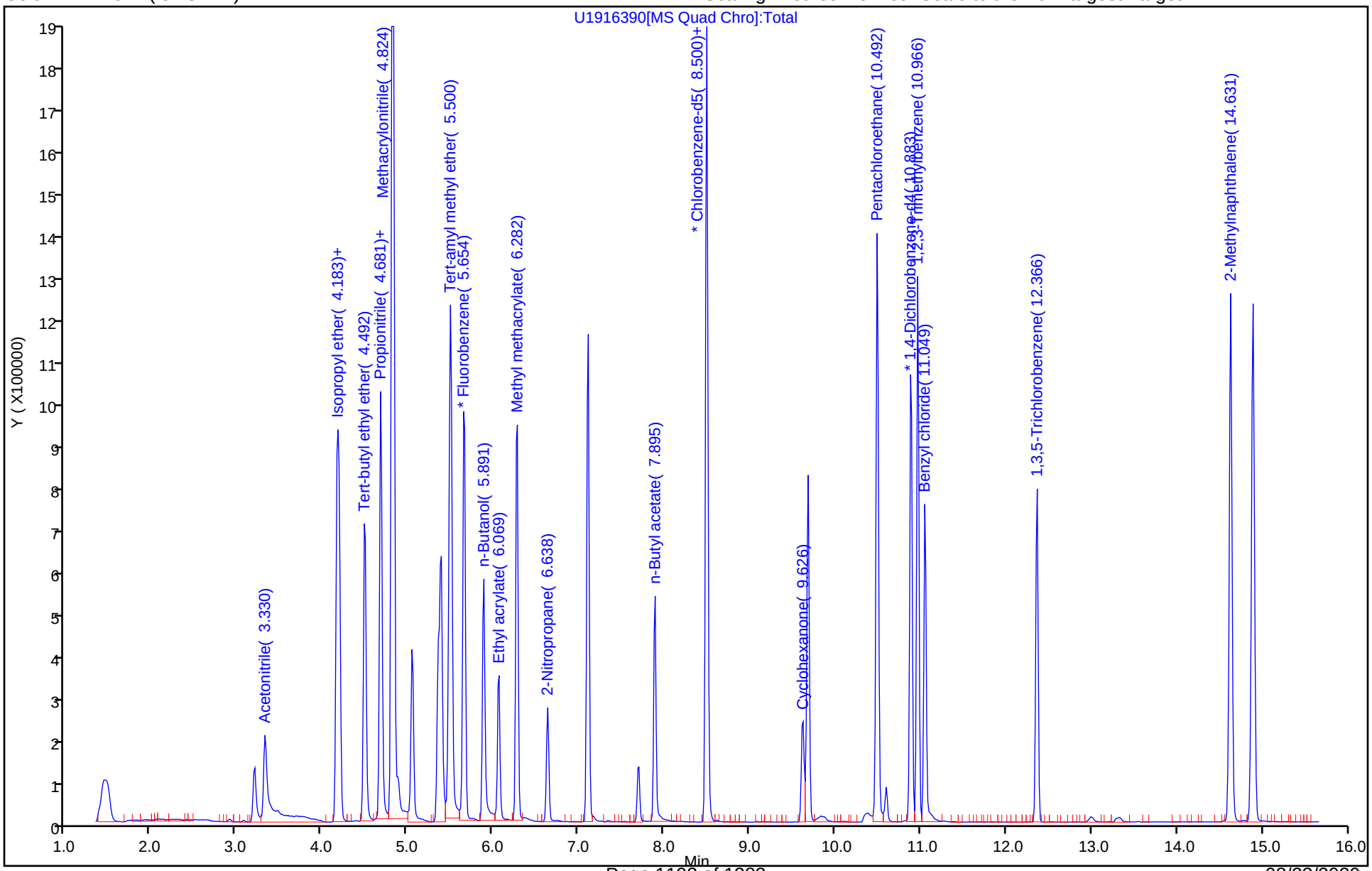
Report Date: 17-Aug-2020 17:50:25 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916390.d

Injection Date:	17-Aug-2020 17:24:29	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	CCV A9			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447506/4 Calibration Date: 08/17/2020 17:46

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: U1916391.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	0.3793	0.1000	0.0197	0.0200	-1.5	20.0
Chloromethane	Ave	0.2883	0.3118	0.1000	0.0216	0.0200	8.1	20.0
Butadiene	Ave	0.2887	0.3188		0.0221	0.0200	10.4	20.0
Vinyl chloride	Ave	0.2980	0.3377	0.1000	0.0227	0.0200	13.3	20.0
Bromomethane	Ave	0.2335	0.2294	0.0500	0.0197	0.0200	-1.7	20.0
Chloroethane	Ave	0.1848	0.2072	0.0500	0.0224	0.0200	12.1	20.0
Dichlorofluoromethane	Ave	0.4581	0.4552		0.0199	0.0200	-0.6	20.0
Trichlorofluoromethane	Ave	0.4984	0.4371	0.1000	0.0175	0.0200	-12.3	20.0
Ethyl ether	Ave	0.1800	0.2142		0.0238	0.0200	19.0	20.0
Acrolein	Ave	0.0445	0.0259		0.0583	0.100	-41.7*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3654	0.1000	0.0204	0.0200	1.8	20.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	Ave	0.2567	0.2715	0.0500	0.0212	0.0200	5.8	20.0
Acetone	Ave	0.0784	0.1184	0.0100	0.0604	0.0400	51.0*	50.0
Iodomethane	Ave	0.4655	0.4223		0.0181	0.0200	-9.3	20.0
Carbon disulfide	Ave	0.7515	0.7814	0.1000	0.0208	0.0200	4.0	20.0
3-Chloro-1-propene	Ave	0.3541	0.3532		0.0199	0.0200	-0.3	20.0
Methyl acetate	Ave	0.2328	0.2806	0.1000	0.0482	0.0400	20.6	50.0
Methylene Chloride	Ave	0.2846	0.3013	0.1000	0.0212	0.0200	5.8	50.0
tert-Butyl alcohol	Ave	0.0271	0.0483		0.357	0.200	78.4*	20.0
Acrylonitrile	Ave	0.1006	0.1420		0.282	0.200	41.2*	20.0
Methyl tert-butyl ether	Ave	0.6938	0.7164	0.1000	0.0207	0.0200	3.3	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3607	0.1000	0.0213	0.0200	6.5	20.0
Hexane	Ave	0.3524	0.3685		0.0209	0.0200	4.6	20.0
1,1-Dichloroethane	Ave	0.4048	0.4439	0.2000	0.0219	0.0200	9.7	20.0
Vinyl acetate	Ave	0.4639	0.5067		0.0218	0.0200	9.2	20.0
2-Butanone	Ave	0.0472	0.0554	0.0100	0.0469	0.0400	17.3	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2907	0.1000	0.0201	0.0200	0.6	20.0
2,2-Dichloropropane	Ave	0.2438	0.2989		0.0245	0.0200	22.6*	20.0
Bromochloromethane	Ave	0.1945	0.2074		0.0213	0.0200	6.6	20.0
Tetrahydrofuran	Lin1		0.1446		0.0567	0.0400	41.9*	20.0
Chloroform	Ave	0.4433	0.4599	0.2000	0.0207	0.0200	3.7	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3973	0.1000	0.0190	0.0200	-4.8	20.0
Cyclohexane	Ave	0.3819	0.4206	0.1000	0.0220	0.0200	10.1	20.0
1,1-Dichloropropene	Ave	0.3519	0.3760		0.0214	0.0200	6.8	20.0
Carbon tetrachloride	Ave	0.4023	0.3669	0.1000	0.0182	0.0200	-8.8	20.0
Isobutyl alcohol	Ave	0.0110	0.0172		0.782	0.500	56.5*	20.0
Benzene	Ave	0.9518	1.056	0.5000	0.0222	0.0200	11.0	20.0
1,2-Dichloroethane	Ave	0.3600	0.3387	0.1000	0.0188	0.0200	-5.9	20.0
n-Heptane	Lin1		0.1820		0.0161	0.0200	-19.5	20.0
Trichloroethene	Ave	0.3160	0.2998	0.1500	0.0190	0.0200	-5.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447506/4 Calibration Date: 08/17/2020 17:46

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: U1916391.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	0.4512	0.1000	0.0197	0.0200	-1.7	20.0
1,2-Dichloropropane	Ave	0.2208	0.2417	0.1000	0.0219	0.0200	9.5	20.0
1,4-Dioxane	Ave	0.0024	0.0050		0.843	0.400	110.8*	50.0
Dibromomethane	Ave	0.2271	0.1876		0.0165	0.0200	-17.4	20.0
Bromodichloromethane	Ave	0.3479	0.3308	0.1500	0.0190	0.0200	-4.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1731		0.0391	0.0400	-2.2	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3855	0.1500	0.0200	0.0200	-0.2	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3475	0.0500	0.0434	0.0400	8.5	50.0
Toluene	Ave	1.352	1.540	0.4000	0.0228	0.0200	13.9	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4842	0.1000	0.0201	0.0200	0.5	20.0
Ethyl methacrylate	Ave	0.4344	0.4673		0.0215	0.0200	7.6	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3199	0.1000	0.0225	0.0200	12.6	20.0
1,3-Dichloropropane	Ave	0.4802	0.5450		0.0227	0.0200	13.5	20.0
Tetrachloroethene	Ave	0.4313	0.4170	0.1500	0.0193	0.0200	-3.3	20.0
2-Hexanone	Ave	0.3149	0.3635	0.0500	0.0462	0.0400	15.4	50.0
Dibromochloromethane	Ave	0.3583	0.3681		0.0205	0.0200	2.7	20.0
1,2-Dibromoethane	Ave	0.3346	0.3422		0.0205	0.0200	2.3	20.0
Chlorobenzene	Ave	0.9253	0.9692	0.3000	0.0209	0.0200	4.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3600		0.0216	0.0200	7.9	20.0
Ethylbenzene	Ave	0.4836	0.5172		0.0214	0.0200	6.9	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6470		0.0220	0.0200	9.8	20.0
o-Xylene	Ave	0.5597	0.6228		0.0223	0.0200	11.3	20.0
Styrene	Ave	0.9588	1.043	0.3000	0.0218	0.0200	8.8	20.0
Bromoform	Ave	0.2933	0.2732	0.1000	0.0186	0.0200	-6.8	20.0
Isopropylbenzene	Ave	1.503	1.640	0.1000	0.0218	0.0200	9.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9721	0.3000	0.0252	0.0200	26.1*	20.0
Bromobenzene	Ave	0.7690	0.7504		0.0195	0.0200	-2.4	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3297		0.0226	0.0200	12.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2738		0.0200	0.0200	0.0	20.0
n-Propylbenzene	Ave	0.7729	0.8537		0.0221	0.0200	10.5	20.0
2-Chlorotoluene	Ave	0.6541	0.7208		0.0220	0.0200	10.2	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.464		0.0221	0.0200	10.7	20.0
4-Chlorotoluene	Ave	0.7072	0.7451		0.0211	0.0200	5.3	20.0
tert-Butylbenzene	Ave	2.113	2.116		0.0200	0.0200	0.2	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.508		0.0222	0.0200	11.1	20.0
sec-Butylbenzene	Ave	2.845	3.035		0.0213	0.0200	6.7	20.0
1,3-Dichlorobenzene	Ave	1.412	1.421	0.6000	0.0201	0.0200	0.6	20.0
p-Isopropyltoluene	Ave	2.492	2.611		0.0210	0.0200	4.8	20.0
1,4-Dichlorobenzene	Ave	1.459	1.444	0.5000	0.0198	0.0200	-1.0	20.0
n-Butylbenzene	Ave	2.050	2.162		0.0211	0.0200	5.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.415	0.4000	0.0221	0.0200	10.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447506/4 Calibration Date: 08/17/2020 17:46

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: U1916391.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	0.2751	0.0500	0.0225	0.0200	12.3	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.7774	0.2000	0.0182	0.0200	-9.1	50.0
Hexachlorobutadiene	Ave	0.4392	0.3190		0.0145	0.0200	-27.4	50.0
Naphthalene	Ave	2.363	2.668		0.0226	0.0200	12.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.7679		0.0200	0.0200	0.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2767		0.0206	0.0200	2.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.3094		0.0200	0.0200	0.0	20.0
Toluene-d8 (Surr)	Ave	1.199	1.374		0.0229	0.0200	14.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4946		0.0219	0.0200	9.6	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916391.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 17-Aug-2020 17:46:51 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 18:15:14 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 18:15:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	967141	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	690161	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	93	372753	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	93	267621	20.0	20.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	98	299230	20.0	20.0	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	948228	20.0	22.9	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	341374	20.0	21.9	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	366786	20.0	19.7	
10 Chloromethane	50	1.823	1.823	0.000	98	301591	20.0	21.6	
11 Butadiene	54	1.918	1.918	0.000	89	308293	20.0	22.1	
12 Vinyl chloride	62	1.918	1.918	0.000	74	326595	20.0	22.7	
13 Bromomethane	94	2.250	2.250	0.000	91	221892	20.0	19.7	
15 Chloroethane	64	2.321	2.321	0.000	99	200339	20.0	22.4	
16 Dichlorofluoromethane	67	2.523	2.523	0.000	97	440281	20.0	19.9	
17 Trichlorofluoromethane	101	2.547	2.547	0.000	97	422717	20.0	17.5	
18 Ethyl ether	59	2.820	2.820	0.000	89	207170	20.0	23.8	
19 Acrolein	56	2.938	2.938	0.000	100	125316	100.0	58.3	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	353379	20.0	20.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.069	3.069	0.000	95	262591	20.0	21.2	
22 Acetone	43	3.080	3.080	0.000	100	228947	40.0	60.4	
24 Iodomethane	142	3.187	3.187	0.000	100	408457	20.0	18.1	
25 Carbon disulfide	76	3.246	3.246	0.000	99	755677	20.0	20.8	
27 3-Chloro-1-propene	41	3.377	3.377	0.000	91	341549	20.0	19.9	
28 Methyl acetate	43	3.389	3.389	0.000	97	542814	40.0	48.2	
29 Methylene Chloride	49	3.484	3.484	0.000	89	291369	20.0	21.2	
30 2-Methyl-2-propanol	59	3.590	3.590	0.000	97	467240	200.0	356.8	
31 Acrylonitrile	53	3.697	3.697	0.000	98	1373497	200.0	282.4	
32 trans-1,2-Dichloroethene	61	3.744	3.744	0.000	71	348862	20.0	21.3	
33 Methyl tert-butyl ether	73	3.744	3.744	0.000	94	692840	20.0	20.7	
34 Hexane	57	3.994	3.994	0.000	90	356408	20.0	20.9	
35 1,1-Dichloroethane	63	4.124	4.124	0.000	96	429302	20.0	21.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	4.160	4.160	0.000	97	490057	20.0	21.8	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	98	107132	40.0	46.9	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	85	281146	20.0	20.1	
42 2,2-Dichloropropane	77	4.646	4.646	0.000	88	289038	20.0	24.5	
46 Chlorobromomethane	49	4.847	4.847	0.000	89	200608	20.0	21.3	
47 Tetrahydrofuran	42	4.895	4.895	0.000	86	279634	40.0	56.7	
48 Chloroform	83	4.919	4.919	0.000	93	444780	20.0	20.7	
49 1,1,1-Trichloroethane	97	5.096	5.096	0.000	98	384224	20.0	19.0	
50 Cyclohexane	84	5.156	5.156	0.000	88	406815	20.0	22.0	
52 Carbon tetrachloride	117	5.239	5.239	0.000	97	354887	20.0	18.2	
51 1,1-Dichloropropene	75	5.239	5.239	0.000	98	363594	20.0	21.4	
53 Isobutyl alcohol	41	5.298	5.298	0.000	94	415538	500.0	782.5	
54 Benzene	78	5.417	5.417	0.000	95	1021674	20.0	22.2	
55 1,2-Dichloroethane	62	5.428	5.428	0.000	97	327530	20.0	18.8	
57 n-Heptane	57	5.654	5.654	0.000	83	176051	20.0	16.1	
59 Trichloroethene	130	5.998	5.998	0.000	97	289958	20.0	19.0	
61 Methylcyclohexane	83	6.176	6.176	0.000	91	436352	20.0	19.7	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	97	233787	20.0	21.9	
64 Dibromomethane	174	6.306	6.306	0.000	95	181398	20.0	16.5	
65 1,4-Dioxane	88	6.306	6.306	0.000	91	97431	400.0	843.2	
66 Dichlorobromomethane	83	6.436	6.436	0.000	100	319883	20.0	19.0	
68 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	92	334847	40.0	39.1	
69 cis-1,3-Dichloropropene	75	6.851	6.851	0.000	96	372855	20.0	20.0	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	96	672115	40.0	43.4	
71 Toluene	91	7.172	7.172	0.000	98	1062763	20.0	22.8	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	334149	20.0	20.1	
73 Ethyl methacrylate	69	7.444	7.444	0.000	88	322515	20.0	21.5	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	220775	20.0	22.5	
75 Tetrachloroethene	166	7.705	7.705	0.000	97	287786	20.0	19.3	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	376114	20.0	22.7	
77 2-Hexanone	43	7.776	7.776	0.000	95	501786	40.0	46.2	
79 Chlorodibromomethane	129	7.931	7.931	0.000	89	254075	20.0	20.5	
81 Ethylene Dibromide	107	8.049	8.049	0.000	99	236186	20.0	20.5	
83 Chlorobenzene	112	8.535	8.535	0.000	96	668886	20.0	20.9	
84 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	94	248489	20.0	21.6	
85 Ethylbenzene	106	8.642	8.642	0.000	98	356925	20.0	21.4	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	446537	20.0	22.0	
87 o-Xylene	106	9.152	9.152	0.000	96	429851	20.0	22.3	
88 Styrene	104	9.164	9.164	0.000	93	719958	20.0	21.8	
89 Bromoform	173	9.354	9.354	0.000	97	188573	20.0	18.6	
90 Isopropylbenzene	105	9.532	9.532	0.000	96	1131517	20.0	21.8	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	95	362350	20.0	25.2	
95 Bromobenzene	156	9.852	9.852	0.000	91	279704	20.0	19.5	
97 trans-1,4-Dichloro-2-butene	53	9.875	9.875	0.000	80	102058	20.0	20.0	
96 1,2,3-Trichloropropane	110	9.875	9.875	0.000	85	122884	20.0	22.6	
98 N-Propylbenzene	120	9.947	9.947	0.000	99	318209	20.0	22.1	
100 2-Chlorotoluene	126	10.041	10.041	0.000	97	268690	20.0	22.0	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	96	918394	20.0	22.1	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	277721	20.0	21.1	
103 tert-Butylbenzene	119	10.480	10.480	0.000	91	788719	20.0	20.0	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	96	934716	20.0	22.2	
106 sec-Butylbenzene	105	10.706	10.706	0.000	94	1131356	20.0	21.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	529640	20.0	20.1	
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	973287	20.0	21.0	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	538379	20.0	19.8	
112 n-Butylbenzene	91	11.287	11.287	0.000	98	805799	20.0	21.1	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	527603	20.0	22.1	
114 1,2-Dibromo-3-Chloropropane	157	12.129	12.129	0.000	86	102538	20.0	22.5	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	93	289790	20.0	18.2	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	118902	20.0	14.5	
118 Naphthalene	128	13.279	13.279	0.000	97	994431	20.0	22.6	
119 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	96	286221	20.0	20.0	
S 125 Trihalomethanes, Total	1				0		80.0	78.9	
S 124 Total BTEX	1				0		100.0	110.6	
S 128 Xylenes, Total	106				0		40.0	44.2	

Reagents:

vmarolistdw_00356	Amount Added: 16.00	Units: uL	
vmrprimw_00399	Amount Added: 16.00	Units: uL	
vmrgas_00351	Amount Added: 16.00	Units: uL	
vm50ss_stk_00085	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added: 0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added: 0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added: 2.00	Units: uL	Run Reagent

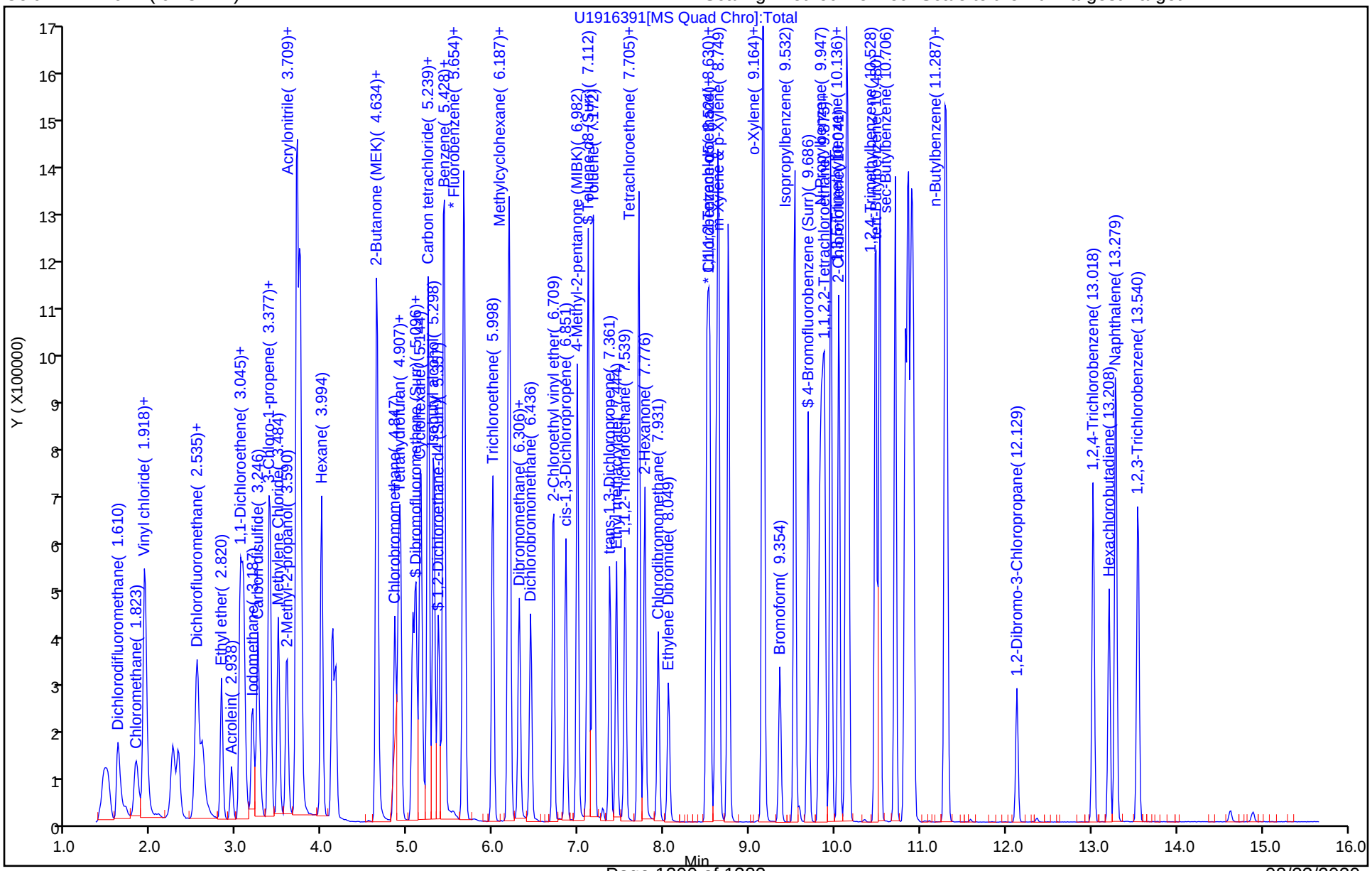
Report Date: 17-Aug-2020 18:15:16 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916391.d

Injection Date:	17-Aug-2020 17:46:51	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCV 240-447698/3 Calibration Date: 08/18/2020 19:05

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: U1916420.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		0.0460		0.230	0.200	14.8	20.0
Diisopropyl ether	Ave	0.2313	0.2110		0.0182	0.0200	-8.8	20.0
2-Chloro-1,3-butadiene	Ave	0.3979	0.4061		0.0204	0.0200	2.1	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7258	0.6542		0.0180	0.0200	-9.9	20.0
Ethyl acetate	Ave	0.3007	0.3370		0.0448	0.0400	12.0	20.0
Propionitrile	Ave	0.0408	0.0638		0.313	0.200	56.5*	20.0
Methacrylonitrile	Ave	0.1828	0.2132		0.233	0.200	16.6	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7700	0.7094		0.0184	0.0200	-7.9	20.0
n-Butanol	Ave	0.0094	0.0158		0.842	0.500	68.5*	20.0
Ethyl acrylate	Ave	0.3703	0.3979		0.0215	0.0200	7.4	20.0
Methyl methacrylate	Ave	0.2459	0.2489		0.0405	0.0400	1.2	20.0
2-Nitropropane	Ave	0.0726	0.0916		0.0505	0.0400	26.2*	20.0
n-Butyl acetate	Ave	0.5364	0.5662		0.0211	0.0200	5.6	20.0
1-Chlorohexane	Ave	0.4610	0.4428		0.0192	0.0200	-4.0	20.0
Cyclohexanone	Ave	0.0137	0.0194		0.283	0.200	41.5*	20.0
Pentachloroethane	Ave	0.3462	0.4357		0.0503	0.0400	25.9*	20.0
1,2,3-Trimethylbenzene	Ave	2.276	2.413		0.0212	0.0200	6.0	20.0
Benzyl chloride	Ave	1.286	1.765		0.0274	0.0200	37.2*	20.0
1,3,5-Trichlorobenzene	Ave	1.021	0.8536		0.0167	0.0200	-16.4	20.0
2-Methylnaphthalene	Ave	1.433	1.206		0.0337	0.0400	-15.9	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916420.d
Lims ID: CCV A9
Client ID:
Sample Type: CCV
Inject. Date: 18-Aug-2020 19:05:19 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub13

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:31:10 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 19:31:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	937676	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	699783	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	346096	20.0	20.0	
26 Acetonitrile	41	3.341	3.341	0.000	99	430897	200.0	229.5	
37 Isopropyl ether	87	4.183	4.183	0.000	92	197835	20.0	18.2	
38 2-Chloro-1,3-butadiene	53	4.207	4.207	0.000	91	380792	20.0	20.4	
39 Tert-butyl ethyl ether	59	4.503	4.503	0.000	97	613452	20.0	18.0	
43 Propionitrile	54	4.693	4.693	0.000	82	598030	200.0	313.0	
44 Ethyl acetate	43	4.693	4.693	0.000	99	631892	40.0	44.8	
45 Methacrylonitrile	41	4.824	4.824	0.000	91	1998933	200.0	233.2	
56 Tert-amyl methyl ether	73	5.511	5.511	0.000	99	665165	20.0	18.4	
58 n-Butanol	56	5.891	5.891	0.000	87	369560	500.0	842.3	
60 Ethyl acrylate	55	6.069	6.069	0.000	99	373059	20.0	21.5	
63 Methyl methacrylate	41	6.282	6.282	0.000	88	466701	40.0	40.5	
67 2-Nitropropane	41	6.638	6.638	0.000	99	171790	40.0	50.5	
78 n-Butyl acetate	43	7.895	7.895	0.000	98	396219	20.0	21.1	
82 1-Chlorohexane	91	8.500	8.500	0.000	97	309831	20.0	19.2	
91 Cyclohexanone	55	9.626	9.626	0.000	92	135381	200.0	283.0	
104 Pentachloroethane	167	10.492	10.492	0.000	92	301588	40.0	50.3	
110 1,2,3-Trimethylbenzene	105	10.966	10.966	0.000	98	835242	20.0	21.2	
111 Benzyl chloride	91	11.049	11.049	0.000	99	610878	20.0	27.4	
115 1,3,5-Trichlorobenzene	180	12.366	12.366	0.000	97	295429	20.0	16.7	
120 2-Methylnaphthalene	142	14.631	14.631	0.000	92	834472	40.0	33.7	

Reagents:

vm50is_stk_A_00007 Amount Added: 2.00 Units: uL
vmra9w_00357 Amount Added: 16.00 Units: uL

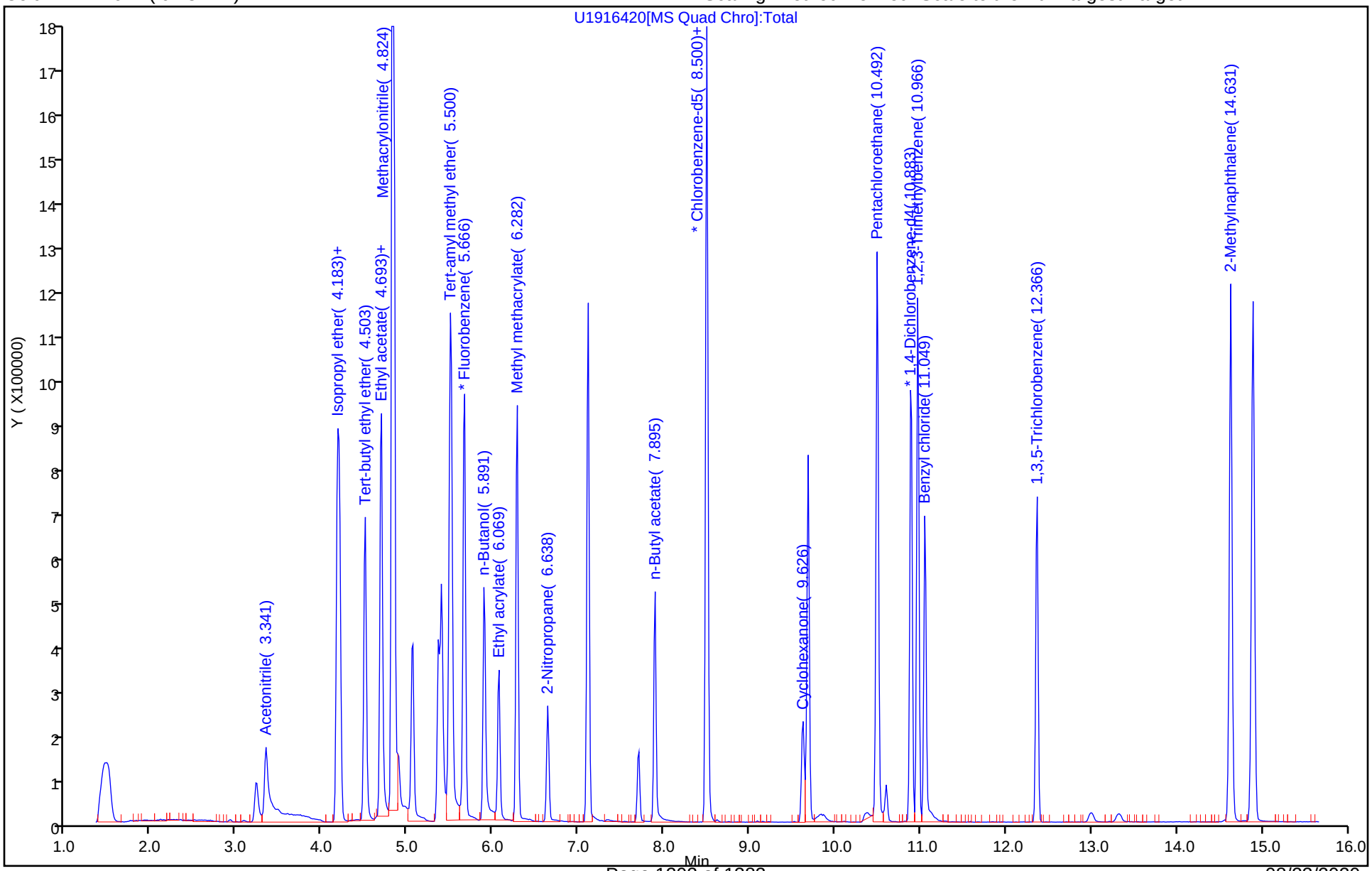
Report Date: 18-Aug-2020 19:31:10 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916420.d

Injection Date:	18-Aug-2020 19:05:19	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	CCV A9			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447698/4 Calibration Date: 08/18/2020 19:27

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: U1916421.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	0.3766	0.1000	0.0196	0.0200	-2.2	20.0
Chloromethane	Ave	0.2883	0.3111	0.1000	0.0216	0.0200	7.9	20.0
Butadiene	Ave	0.2887	0.3144		0.0218	0.0200	8.9	20.0
Vinyl chloride	Ave	0.2980	0.3296	0.1000	0.0221	0.0200	10.6	20.0
Bromomethane	Ave	0.2335	0.2244	0.0500	0.0192	0.0200	-3.9	20.0
Chloroethane	Ave	0.1848	0.2068	0.0500	0.0224	0.0200	11.9	20.0
Dichlorofluoromethane	Ave	0.4581	0.4563		0.0199	0.0200	-0.4	20.0
Trichlorofluoromethane	Ave	0.4984	0.4283	0.1000	0.0172	0.0200	-14.0	20.0
Ethyl ether	Ave	0.1800	0.2060		0.0229	0.0200	14.4	20.0
Acrolein	Ave	0.0445	0.0221		0.0497	0.100	-50.3*	20.0
1,1-Dichloroethene	Ave	0.3589	0.3506	0.1000	0.0195	0.0200	-2.3	20.0
1,1,2-Trichlorotrifluoroetha ne (Freon 113)	Ave	0.2567	0.2610	0.0500	0.0203	0.0200	1.7	20.0
Acetone	Ave	0.0784	0.0957	0.0100	0.0488	0.0400	22.1	50.0
Iodomethane	Ave	0.4655	0.4050		0.0174	0.0200	-13.0	20.0
Carbon disulfide	Ave	0.7515	0.7418	0.1000	0.0197	0.0200	-1.3	20.0
3-Chloro-1-propene	Ave	0.3541	0.3420		0.0193	0.0200	-3.4	20.0
Methyl acetate	Ave	0.2328	0.2702	0.1000	0.0464	0.0400	16.1	50.0
Methylene Chloride	Ave	0.2846	0.2956	0.1000	0.0208	0.0200	3.8	50.0
tert-Butyl alcohol	Ave	0.0271	0.0309		0.228	0.200	14.1	20.0
Acrylonitrile	Ave	0.1006	0.1272		0.253	0.200	26.5*	20.0
trans-1,2-Dichloroethene	Ave	0.3387	0.3517	0.1000	0.0208	0.0200	3.8	20.0
Methyl tert-butyl ether	Ave	0.6938	0.6646	0.1000	0.0192	0.0200	-4.2	20.0
Hexane	Ave	0.3524	0.3745		0.0213	0.0200	6.3	20.0
1,1-Dichloroethane	Ave	0.4048	0.4314	0.2000	0.0213	0.0200	6.6	20.0
Vinyl acetate	Ave	0.4639	0.4675		0.0202	0.0200	0.8	20.0
2,2-Dichloropropane	Ave	0.2438	0.2881		0.0236	0.0200	18.2	20.0
2-Butanone	Ave	0.0472	0.0515	0.0100	0.0436	0.0400	8.9	50.0
cis-1,2-Dichloroethene	Ave	0.2891	0.2797	0.1000	0.0193	0.0200	-3.3	20.0
Bromochloromethane	Ave	0.1945	0.1964		0.0202	0.0200	0.9	20.0
Tetrahydrofuran	Lin1		0.1455		0.0571	0.0400	42.8*	20.0
Chloroform	Ave	0.4433	0.4477	0.2000	0.0202	0.0200	1.0	20.0
1,1,1-Trichloroethane	Ave	0.4174	0.3821	0.1000	0.0183	0.0200	-8.5	20.0
Cyclohexane	Ave	0.3819	0.3906	0.1000	0.0205	0.0200	2.3	20.0
1,1-Dichloropropene	Ave	0.3519	0.3594		0.0204	0.0200	2.1	20.0
Carbon tetrachloride	Ave	0.4023	0.3475	0.1000	0.0173	0.0200	-13.6	20.0
Isobutyl alcohol	Ave	0.0110	0.0131		0.595	0.500	18.9	20.0
Benzene	Ave	0.9518	1.025	0.5000	0.0215	0.0200	7.7	20.0
1,2-Dichloroethane	Ave	0.3600	0.3302	0.1000	0.0183	0.0200	-8.3	20.0
n-Heptane	Lin1		0.1857		0.0165	0.0200	-17.5	20.0
Trichloroethene	Ave	0.3160	0.2898	0.1500	0.0183	0.0200	-8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447698/4 Calibration Date: 08/18/2020 19:27

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: U1916421.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	0.4212	0.1000	0.0184	0.0200	-8.2	20.0
1,2-Dichloropropane	Ave	0.2208	0.2369	0.1000	0.0215	0.0200	7.3	20.0
1,4-Dioxane	Ave	0.0024	0.0045		0.748	0.400	87.1*	50.0
Dibromomethane	Ave	0.2271	0.1798		0.0158	0.0200	-20.8*	20.0
Bromodichloromethane	Ave	0.3479	0.3179	0.1500	0.0183	0.0200	-8.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1770	0.1790		0.0404	0.0400	1.1	20.0
cis-1,3-Dichloropropene	Ave	0.3865	0.3784	0.1500	0.0196	0.0200	-2.1	50.0
4-Methyl-2-pentanone	Ave	0.3203	0.3592	0.0500	0.0449	0.0400	12.1	50.0
Toluene	Ave	1.352	1.476	0.4000	0.0218	0.0200	9.2	20.0
trans-1,3-Dichloropropene	Ave	0.4818	0.4770	0.1000	0.0198	0.0200	-1.0	20.0
Ethyl methacrylate	Ave	0.4344	0.4662		0.0215	0.0200	7.3	20.0
1,1,2-Trichloroethane	Ave	0.2842	0.3119	0.1000	0.0220	0.0200	9.8	20.0
1,3-Dichloropropane	Ave	0.4802	0.5338		0.0222	0.0200	11.1	20.0
Tetrachloroethene	Ave	0.4313	0.3912	0.1500	0.0181	0.0200	-9.3	20.0
2-Hexanone	Ave	0.3149	0.3707	0.0500	0.0471	0.0400	17.7	50.0
Dibromochloromethane	Ave	0.3583	0.3487		0.0195	0.0200	-2.7	20.0
1,2-Dibromoethane	Ave	0.3346	0.3309		0.0198	0.0200	-1.1	20.0
Chlorobenzene	Ave	0.9253	0.9380	0.3000	0.0203	0.0200	1.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3336	0.3398		0.0204	0.0200	1.9	20.0
Ethylbenzene	Ave	0.4836	0.4964		0.0205	0.0200	2.6	20.0
m-Xylene & p-Xylene	Ave	0.5890	0.6212		0.0211	0.0200	5.5	20.0
o-Xylene	Ave	0.5597	0.5999		0.0214	0.0200	7.2	20.0
Styrene	Ave	0.9588	1.013	0.3000	0.0211	0.0200	5.6	20.0
Bromoform	Ave	0.2933	0.2609	0.1000	0.0178	0.0200	-11.0	20.0
Isopropylbenzene	Ave	1.503	1.539	0.1000	0.0205	0.0200	2.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7706	0.9377	0.3000	0.0243	0.0200	21.7*	20.0
Bromobenzene	Ave	0.7690	0.7156		0.0186	0.0200	-6.9	20.0
1,2,3-Trichloropropane	Ave	0.2921	0.3229		0.0221	0.0200	10.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2737	0.2736		0.0200	0.0200	-0.0	20.0
n-Propylbenzene	Ave	0.7729	0.7937		0.0205	0.0200	2.7	20.0
2-Chlorotoluene	Ave	0.6541	0.6885		0.0211	0.0200	5.3	20.0
1,3,5-Trimethylbenzene	Ave	2.225	2.300		0.0207	0.0200	3.4	20.0
4-Chlorotoluene	Ave	0.7072	0.7060		0.0200	0.0200	-0.2	20.0
tert-Butylbenzene	Ave	2.113	1.968		0.0186	0.0200	-6.8	20.0
1,2,4-Trimethylbenzene	Ave	2.256	2.316		0.0205	0.0200	2.6	20.0
sec-Butylbenzene	Ave	2.845	2.821		0.0198	0.0200	-0.8	20.0
1,3-Dichlorobenzene	Ave	1.412	1.325	0.6000	0.0188	0.0200	-6.2	20.0
p-Isopropyltoluene	Ave	2.492	2.393		0.0192	0.0200	-4.0	20.0
1,4-Dichlorobenzene	Ave	1.459	1.356	0.5000	0.0186	0.0200	-7.1	20.0
n-Butylbenzene	Ave	2.050	1.957		0.0191	0.0200	-4.5	20.0
1,2-Dichlorobenzene	Ave	1.282	1.286	0.4000	0.0201	0.0200	0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Lab Sample ID: CCVIS 240-447698/4 Calibration Date: 08/18/2020 19:27

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: U1916421.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	0.2495	0.0500	0.0204	0.0200	1.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8550	0.6560	0.2000	0.0153	0.0200	-23.3	50.0
Hexachlorobutadiene	Ave	0.4392	0.2774		0.0126	0.0200	-36.8	50.0
Naphthalene	Ave	2.363	2.319		0.0196	0.0200	-1.9	50.0
1,2,3-Trichlorobenzene	Ave	0.7677	0.6650		0.0173	0.0200	-13.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2692	0.2637		0.0196	0.0200	-2.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3092	0.2949		0.0191	0.0200	-4.6	20.0
Toluene-d8 (Surr)	Ave	1.199	1.320		0.0220	0.0200	10.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4513	0.4696		0.0208	0.0200	4.1	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916421.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Aug-2020 19:27:44 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:48:59 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 19:48:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	954186	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	87	706054	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	93	382688	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.049	0.000	94	251595	20.0	19.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	98	281341	20.0	19.1	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	931945	20.0	22.0	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	331563	20.0	20.8	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	359363	20.0	19.6	
10 Chloromethane	50	1.823	1.823	0.000	98	296847	20.0	21.6	
11 Butadiene	54	1.918	1.918	0.000	87	299972	20.0	21.8	
12 Vinyl chloride	62	1.918	1.918	0.000	77	314477	20.0	22.1	
13 Bromomethane	94	2.250	2.250	0.000	91	214086	20.0	19.2	
15 Chloroethane	64	2.310	2.310	0.000	99	197317	20.0	22.4	
16 Dichlorofluoromethane	67	2.523	2.523	0.000	97	435431	20.0	19.9	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	98	408718	20.0	17.2	
18 Ethyl ether	59	2.820	2.820	0.000	89	196548	20.0	22.9	
19 Acrolein	56	2.938	2.938	0.000	98	105387	100.0	49.7	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	334532	20.0	19.5	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.069	3.069	0.000	94	249069	20.0	20.3	
22 Acetone	43	3.080	3.080	0.000	100	182688	40.0	48.8	
24 Iodomethane	142	3.175	3.175	0.000	99	386433	20.0	17.4	
25 Carbon disulfide	76	3.246	3.246	0.000	99	707777	20.0	19.7	
27 3-Chloro-1-propene	41	3.365	3.365	0.000	91	326281	20.0	19.3	
28 Methyl acetate	43	3.389	3.389	0.000	97	515561	40.0	46.4	
29 Methylene Chloride	49	3.484	3.484	0.000	90	282059	20.0	20.8	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	97	294841	200.0	228.2	
31 Acrylonitrile	53	3.697	3.697	0.000	99	1213570	200.0	253.0	
32 trans-1,2-Dichloroethene	61	3.733	3.733	0.000	76	335563	20.0	20.8	
33 Methyl tert-butyl ether	73	3.744	3.744	0.000	95	634156	20.0	19.2	
34 Hexane	57	3.994	3.994	0.000	90	357292	20.0	21.3	
35 1,1-Dichloroethane	63	4.112	4.112	0.000	96	411658	20.0	21.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	4.148	4.148	0.000	97	446099	20.0	20.2	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	96	98183	40.0	43.6	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	80	266841	20.0	19.3	
42 2,2-Dichloropropane	77	4.634	4.634	0.000	88	274902	20.0	23.6	
46 Chlorobromomethane	49	4.847	4.847	0.000	90	187352	20.0	20.2	
47 Tetrahydrofuran	42	4.895	4.895	0.000	85	277693	40.0	57.1	
48 Chloroform	83	4.907	4.907	0.000	93	427226	20.0	20.2	
49 1,1,1-Trichloroethane	97	5.085	5.085	0.000	98	364585	20.0	18.3	
50 Cyclohexane	84	5.144	5.144	0.000	88	372660	20.0	20.5	
52 Carbon tetrachloride	117	5.239	5.239	0.000	97	331607	20.0	17.3	
51 1,1-Dichloropropene	75	5.239	5.239	0.000	97	342931	20.0	20.4	
53 Isobutyl alcohol	41	5.298	5.298	0.000	94	311555	500.0	594.6	
54 Benzene	78	5.417	5.417	0.000	95	978231	20.0	21.5	
55 1,2-Dichloroethane	62	5.428	5.428	0.000	97	315034	20.0	18.3	
57 n-Heptane	57	5.654	5.654	0.000	88	177208	20.0	16.5	
59 Trichloroethene	130	5.998	5.998	0.000	97	276558	20.0	18.3	
61 Methylcyclohexane	83	6.176	6.176	0.000	91	401904	20.0	18.4	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	97	226076	20.0	21.5	
64 Dibromomethane	174	6.306	6.306	0.000	94	171542	20.0	15.8	
65 1,4-Dioxane	88	6.306	6.306	0.000	92	85310	400.0	748.3	
66 Dichlorobromomethane	83	6.436	6.436	0.000	99	303308	20.0	18.3	
68 2-Chloroethyl vinyl ether	63	6.697	6.697	0.000	92	341629	40.0	40.4	
69 cis-1,3-Dichloropropene	75	6.851	6.851	0.000	97	361098	20.0	19.6	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	96	685440	40.0	44.9	
71 Toluene	91	7.172	7.172	0.000	98	1041830	20.0	21.8	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	336783	20.0	19.8	
73 Ethyl methacrylate	69	7.444	7.444	0.000	88	329144	20.0	21.5	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	220232	20.0	22.0	
75 Tetrachloroethene	166	7.705	7.705	0.000	97	276183	20.0	18.1	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	376862	20.0	22.2	
77 2-Hexanone	43	7.776	7.776	0.000	95	523499	40.0	47.1	
79 Chlorodibromomethane	129	7.931	7.931	0.000	90	246225	20.0	19.5	
81 Ethylene Dibromide	107	8.049	8.049	0.000	99	233623	20.0	19.8	
83 Chlorobenzene	112	8.535	8.535	0.000	96	662307	20.0	20.3	
84 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	95	239909	20.0	20.4	
85 Ethylbenzene	106	8.642	8.642	0.000	98	350463	20.0	20.5	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	438580	20.0	21.1	
87 o-Xylene	106	9.152	9.152	0.000	96	423566	20.0	21.4	
88 Styrene	104	9.164	9.164	0.000	93	714987	20.0	21.1	
89 Bromoform	173	9.354	9.354	0.000	97	184198	20.0	17.8	
90 Isopropylbenzene	105	9.532	9.532	0.000	96	1086564	20.0	20.5	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	94	358845	20.0	24.3	
95 Bromobenzene	156	9.852	9.852	0.000	91	273854	20.0	18.6	
97 trans-1,4-Dichloro-2-butene	53	9.875	9.875	0.000	81	104697	20.0	20.0	
96 1,2,3-Trichloropropane	110	9.875	9.875	0.000	86	123554	20.0	22.1	
98 N-Propylbenzene	120	9.947	9.947	0.000	99	303719	20.0	20.5	
100 2-Chlorotoluene	126	10.041	10.041	0.000	97	263476	20.0	21.1	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	95	880206	20.0	20.7	
102 4-Chlorotoluene	126	10.160	10.160	0.000	97	270164	20.0	20.0	
103 tert-Butylbenzene	119	10.480	10.480	0.000	91	753191	20.0	18.6	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	96	886219	20.0	20.5	
106 sec-Butylbenzene	105	10.706	10.706	0.000	94	1079503	20.0	19.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	507161	20.0	18.8	
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	915804	20.0	19.2	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	96	518786	20.0	18.6	
112 n-Butylbenzene	91	11.287	11.287	0.000	98	749074	20.0	19.1	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	492278	20.0	20.1	
114 1,2-Dibromo-3-Chloropropane	157	12.129	12.129	0.000	88	95489	20.0	20.4	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	94	251044	20.0	15.3	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	106171	20.0	12.6	
118 Naphthalene	128	13.279	13.279	0.000	97	887492	20.0	19.6	
119 1,2,3-Trichlorobenzene	180	13.552	13.552	0.000	96	254503	20.0	17.3	
S 125 Trihalomethanes, Total	1				0		80.0	75.7	
S 124 Total BTEX	1				0		100.0	106.4	
S 128 Xylenes, Total	106				0		40.0	42.5	

Reagents:

vmarolistdw_00356	Amount Added: 16.00	Units: uL	
vmrprimw_00399	Amount Added: 16.00	Units: uL	
vmrgas_00351	Amount Added: 16.00	Units: uL	
vm50ss_stk_00085	Amount Added: 2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added: 0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added: 0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added: 2.00	Units: uL	Run Reagent

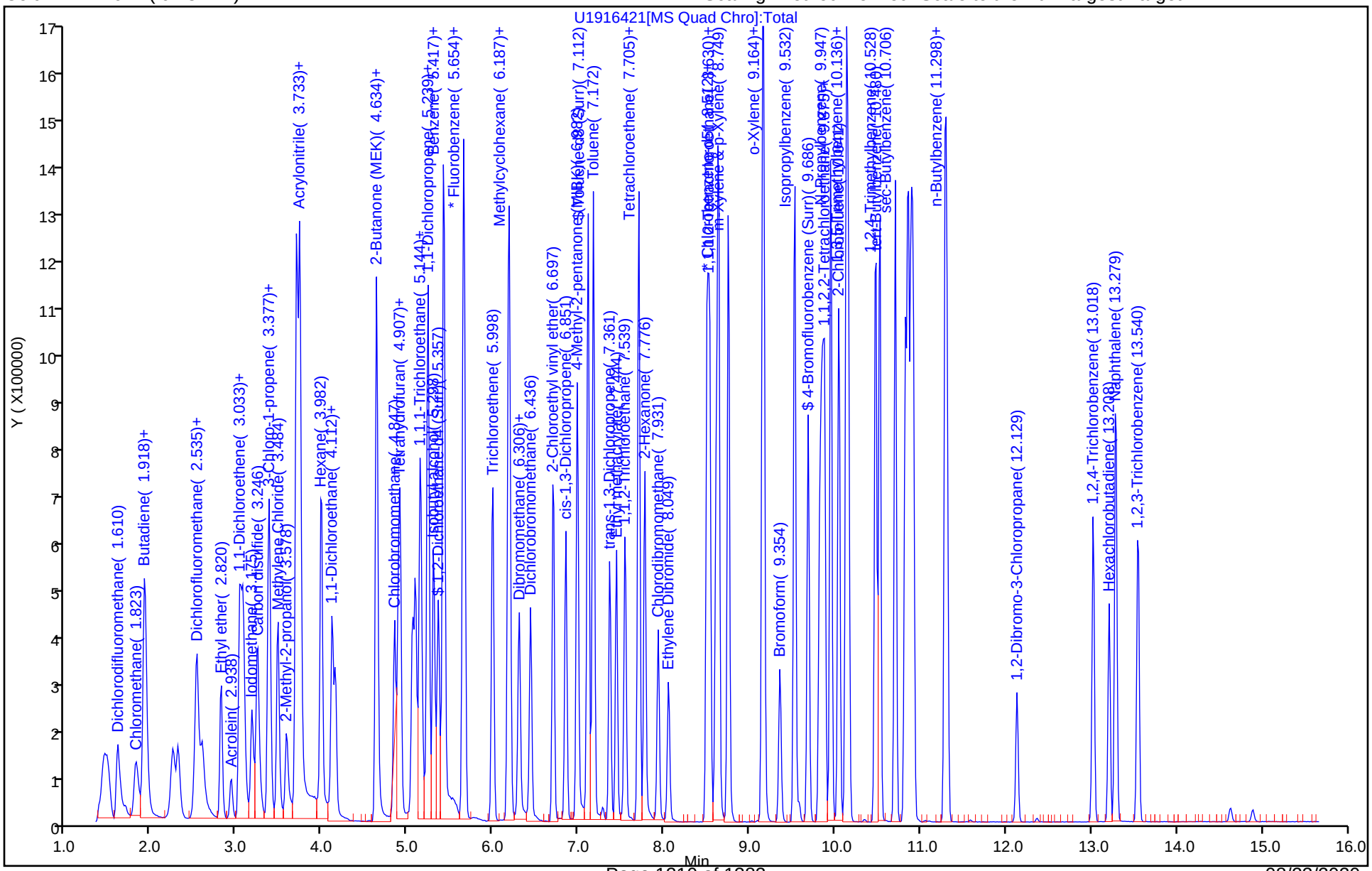
Report Date: 18-Aug-2020 19:49:01 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916421.d

Injection Date:	18-Aug-2020 19:27:44	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Apr-2019 13:47:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-001
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:21:58 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 14:30:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.433	3.433	0.000	0	656639	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

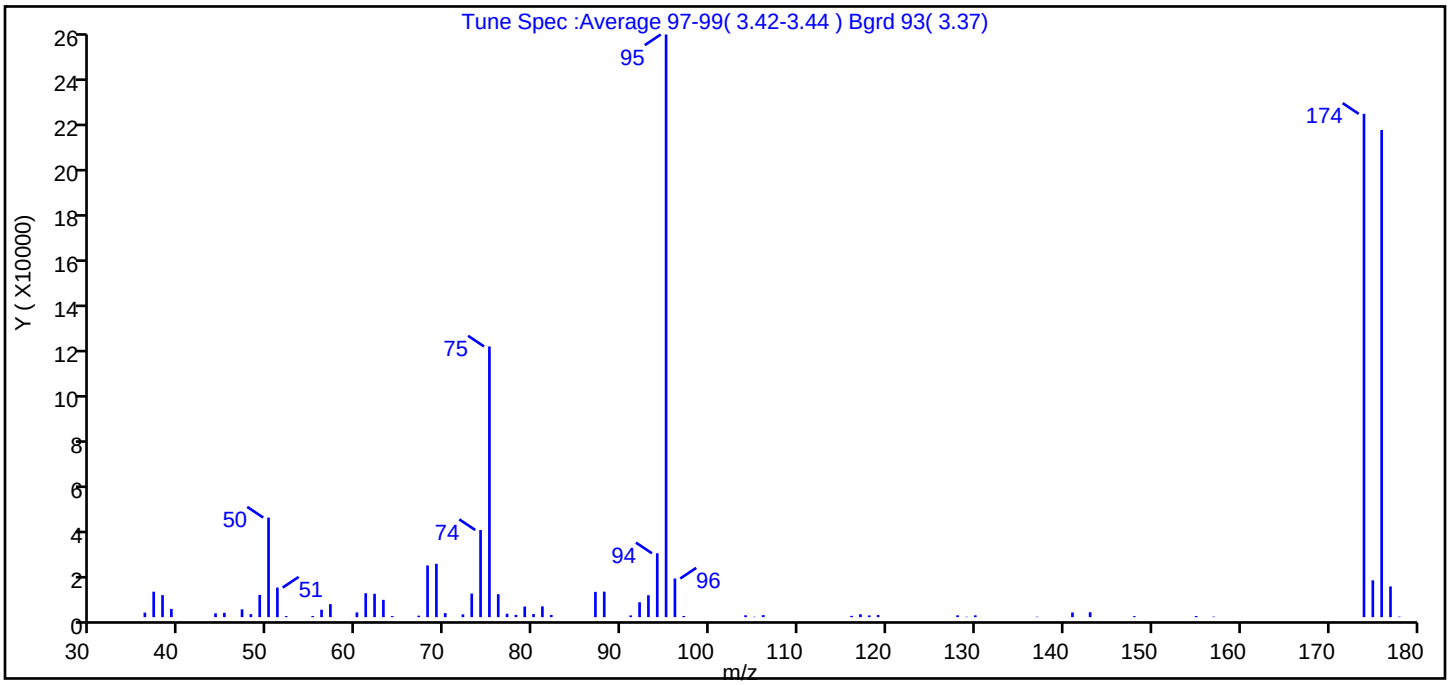
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D
Injection Date: 30-Apr-2019 13:47:30 Instrument ID: A3UX12
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.1
75	30 to 60% of m/z 95	46.5
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	86.4
175	5 to 9% of m/z 174	6.3 (7.3)
176	Greater than 95% but less than 101% of m/z 174	83.6 (96.8)
177	5 to 9% of m/z 176	5.3 (6.3)

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D\8260_12_h2o.rslt\spectra.d
Injection Date: 30-Apr-2019 13:47:30
Spectrum: Tune Spec :Average 97-99(3.42-3.44) Bgrd 93(3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 65

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1949	62.00	10132	82.00	933	128.00	791
37.00	11044	63.00	7504	87.00	10980	129.00	174
38.00	9555	64.00	476	88.00	11070	130.00	792
39.00	3574	67.00	648	91.00	753	137.00	198
44.00	1655	68.00	22440	92.00	6468	141.00	2039
45.00	1879	69.00	23152	93.00	9506	143.00	2139
47.00	3381	70.00	1747	94.00	27720	148.00	438
48.00	1302	72.00	1224	95.00	252864	155.00	497
49.00	9643	73.00	10230	96.00	16760	157.00	207
50.00	43216	74.00	37816	97.00	508	174.00	218432
51.00	12836	75.00	117464	104.00	812	175.00	15985
52.00	474	76.00	9966	105.00	167	176.00	211392
55.00	510	77.00	1482	106.00	890	177.00	13318
56.00	3216	78.00	977	116.00	563	178.00	214
57.00	5655	79.00	4608	117.00	1264		
60.00	2066	80.00	1344	118.00	750		
61.00	10369	81.00	4681	119.00	914		

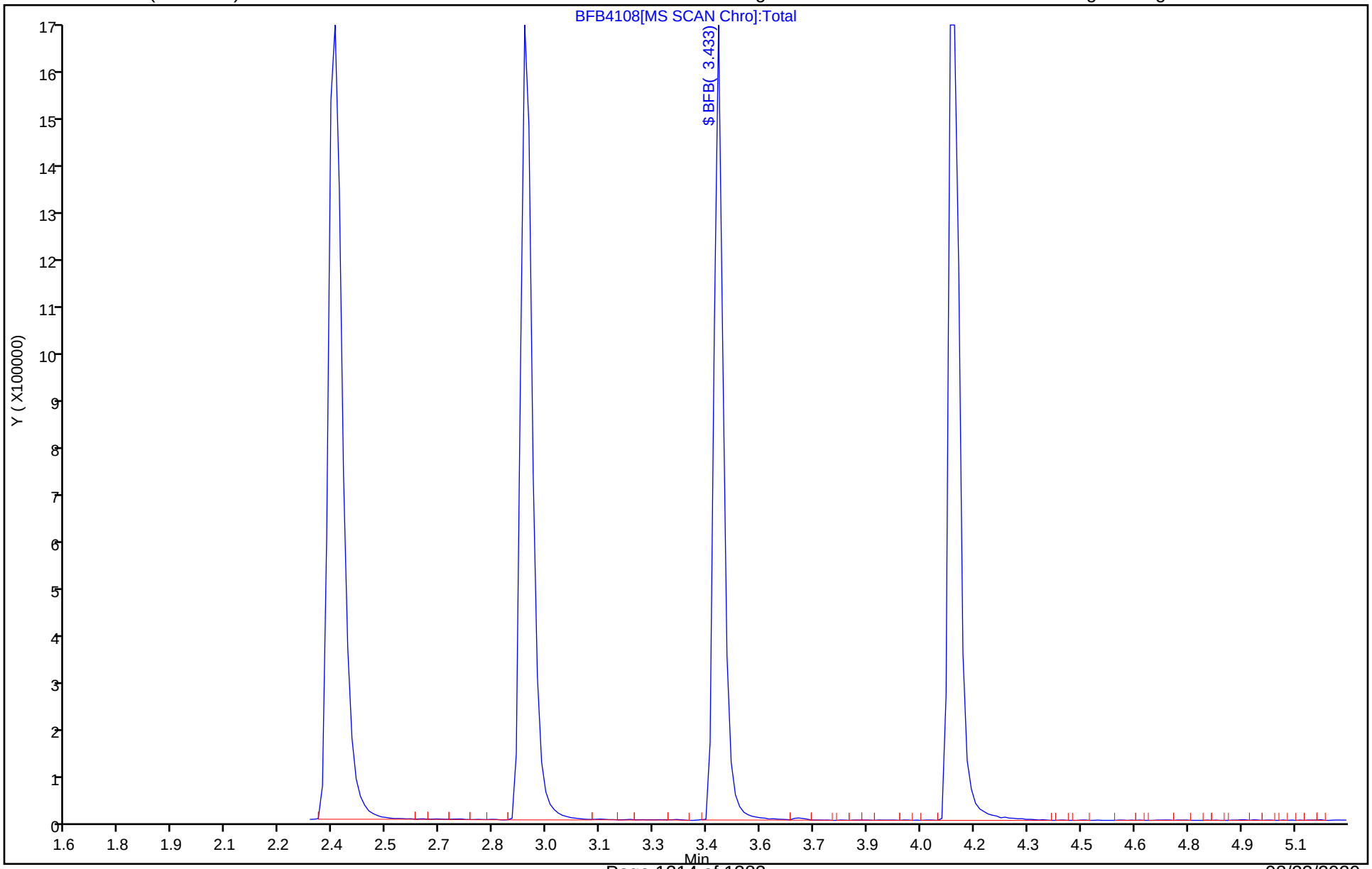
Report Date: 30-Apr-2019 17:21:59 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D

Injection Date:	30-Apr-2019 13:47:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\BFB4436a.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Jul-2020 16:09:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0100113-001
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-Jul-2020 16:51:51 Calib Date: 15-Jul-2020 22:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200715-100077.b\U1279106.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.421	3.421	0.000	0	523292	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

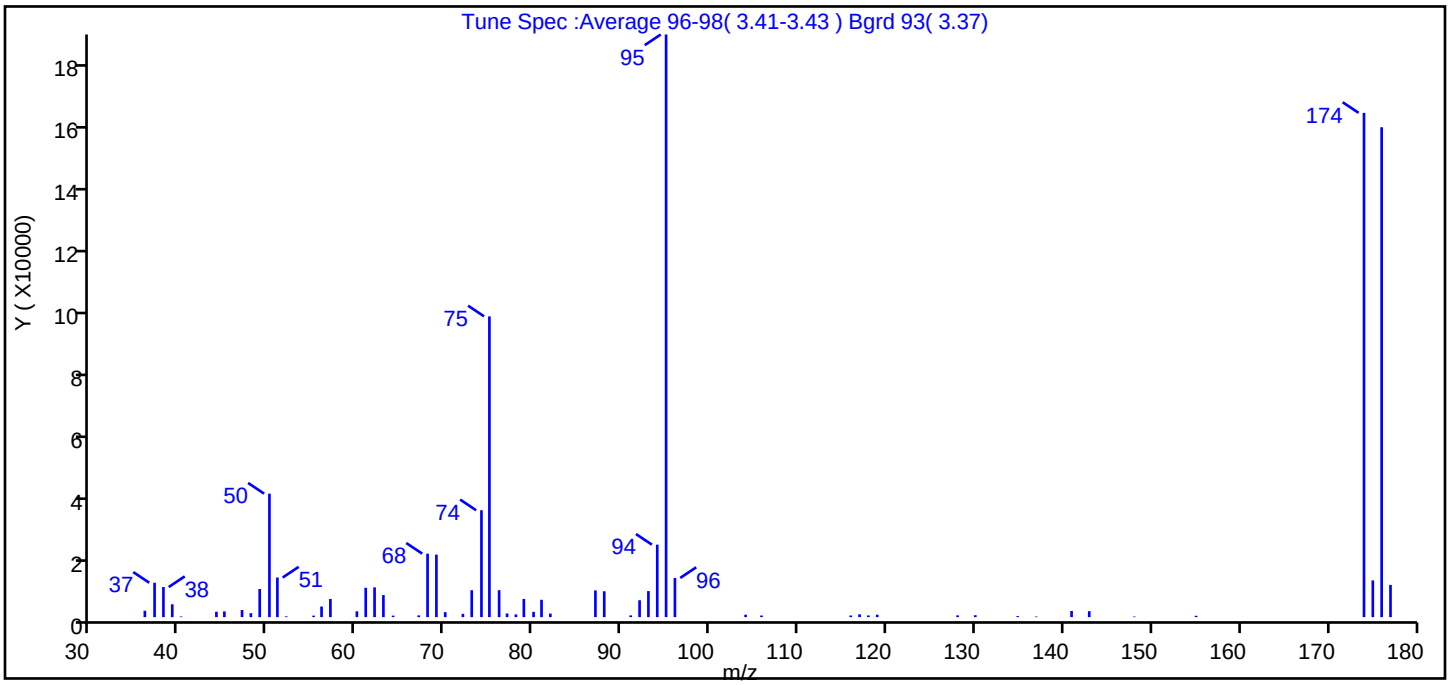
vmbfb_00025 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\BFB4436a.D
Injection Date: 16-Jul-2020 16:09:30 Instrument ID: A3UX12
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.2
75	30 to 60% of m/z 95	51.6
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	86.5
175	5 to 9% of m/z 174	6.3 (7.3)
176	Greater than 95% but less than 101% of m/z 174	84.1 (97.2)
177	5 to 9% of m/z 176	5.5 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\BFB4436a.D\8260_12_h2o.rslt\spectra.d
Injection Date: 16-Jul-2020 16:09:30
Spectrum: Tune Spec :Average 96-98(3.41-3.43) Bgrd 93(3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2092	60.00	1892	79.00	5925	118.00	553
37.00	11204	61.00	9556	80.00	1722	119.00	790
38.00	9809	62.00	9693	81.00	5646	128.00	579
39.00	4190	63.00	7176	82.00	1157	130.00	628
40.00	211	64.00	505	87.00	8707	135.00	337
44.00	1759	67.00	566	88.00	8430	137.00	194
45.00	1870	68.00	20672	91.00	571	141.00	2014
47.00	2314	69.00	20352	92.00	5506	143.00	1946
48.00	1290	70.00	1628	93.00	8490	148.00	196
49.00	9168	72.00	1068	94.00	23608	155.00	446
50.00	40224	73.00	8768	95.00	189760	174.00	164224
51.00	12908	74.00	34816	96.00	12771	175.00	11968
52.00	259	75.00	97960	104.00	786	176.00	159552
55.00	490	76.00	8776	106.00	525	177.00	10502
56.00	3458	77.00	1200	116.00	539		
57.00	5925	78.00	890	117.00	922		

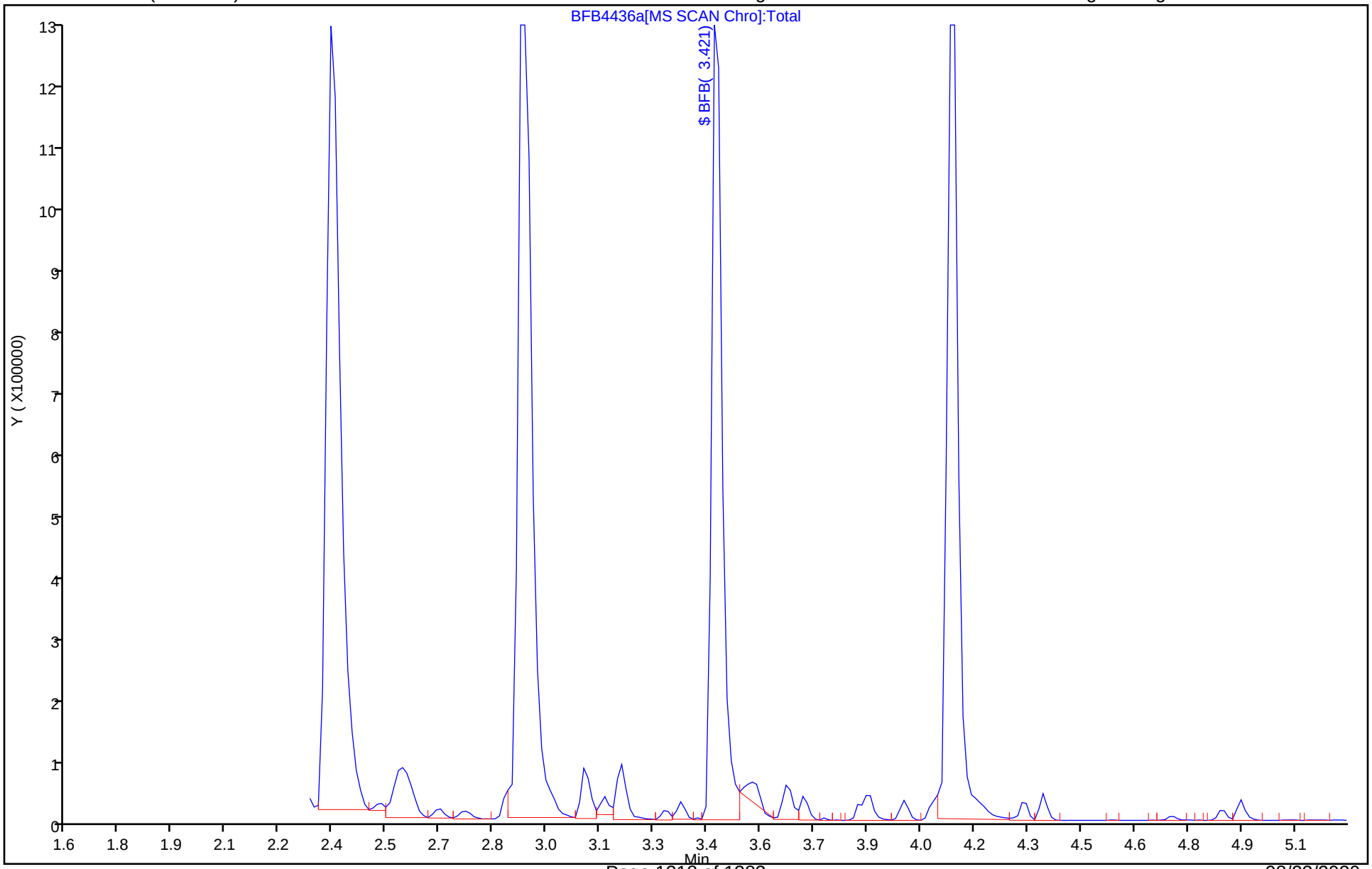
Report Date: 16-Jul-2020 16:51:52 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\BFB4436a.D

Injection Date:	16-Jul-2020 16:09:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\BFB4462.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 19-Aug-2020 15:23:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-001
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 15:32:55 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1059

First Level Reviewer: laveyt Date: 19-Aug-2020 15:32:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.433	3.433	0.000	0	494174	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

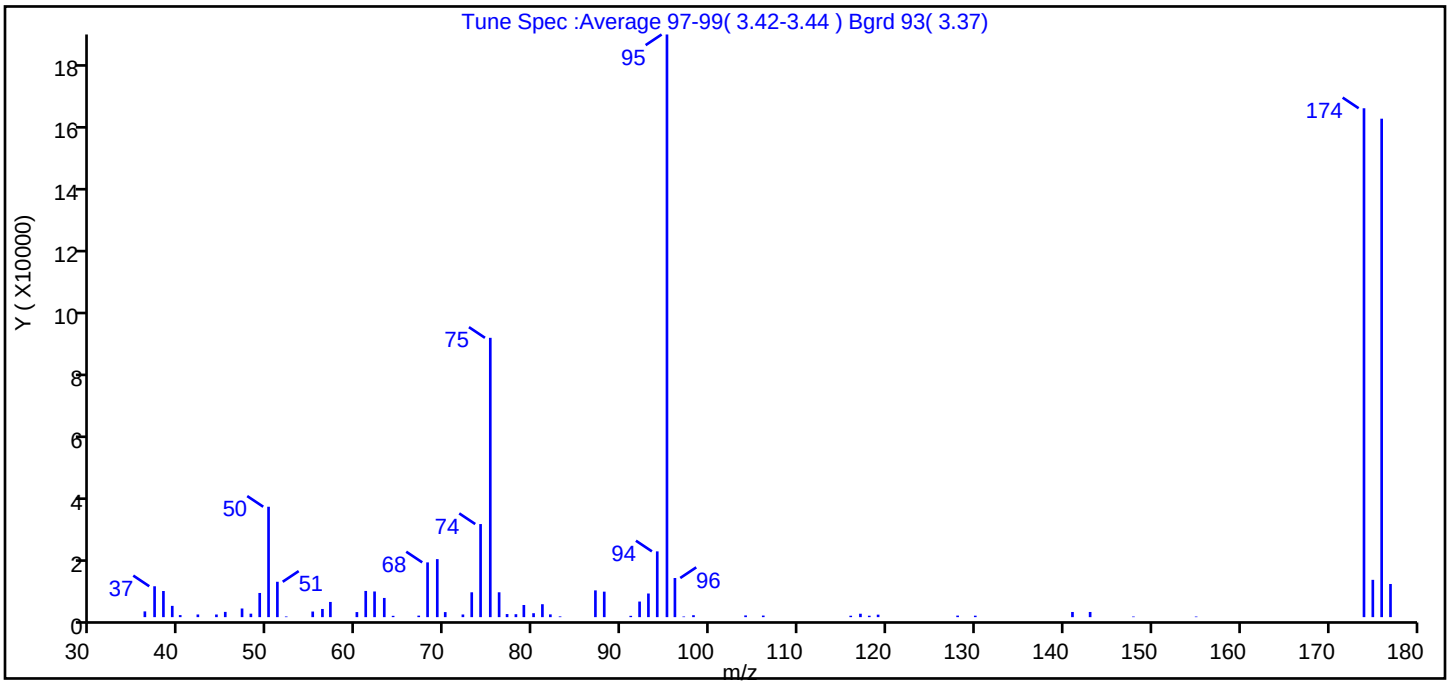
vmbfb_00025 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\BFB4462.D
Injection Date: 19-Aug-2020 15:23:30 Instrument ID: A3UX12
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.9
75	30 to 60% of m/z 95	47.9
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	87.3
175	5 to 9% of m/z 174	6.4 (7.3)
176	Greater than 95% but less than 101% of m/z 174	85.5 (98.0)
177	5 to 9% of m/z 176	5.7 (6.7)

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\BFB4462.D\8260_12_h2o.rslt\spectra.d
Injection Date: 19-Aug-2020 15:23:30
Spectrum: Tune Spec :Average 97-99(3.42-3.44) Bgrd 93(3.37)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1836	57.00	4854	78.00	939	104.00	548
37.00	9857	60.00	1619	79.00	3878	106.00	506
38.00	8343	61.00	8366	80.00	1256	116.00	452
39.00	3597	62.00	8192	81.00	4126	117.00	1090
40.00	652	63.00	6128	82.00	880	118.00	458
42.00	852	64.00	421	83.00	230	119.00	794
44.00	844	67.00	480	87.00	8539	128.00	495
45.00	1678	68.00	17480	88.00	8136	130.00	467
47.00	2760	69.00	18520	91.00	421	141.00	1650
48.00	1110	70.00	1613	92.00	4977	143.00	1650
49.00	7719	72.00	852	93.00	7547	148.00	194
50.00	35240	73.00	7932	94.00	20992	155.00	190
51.00	11290	74.00	29712	95.00	185984	174.00	162432
52.00	212	75.00	89160	96.00	12491	175.00	11908
55.00	1789	76.00	7935	97.00	202	176.00	159104
56.00	2609	77.00	983	98.00	618	177.00	10584

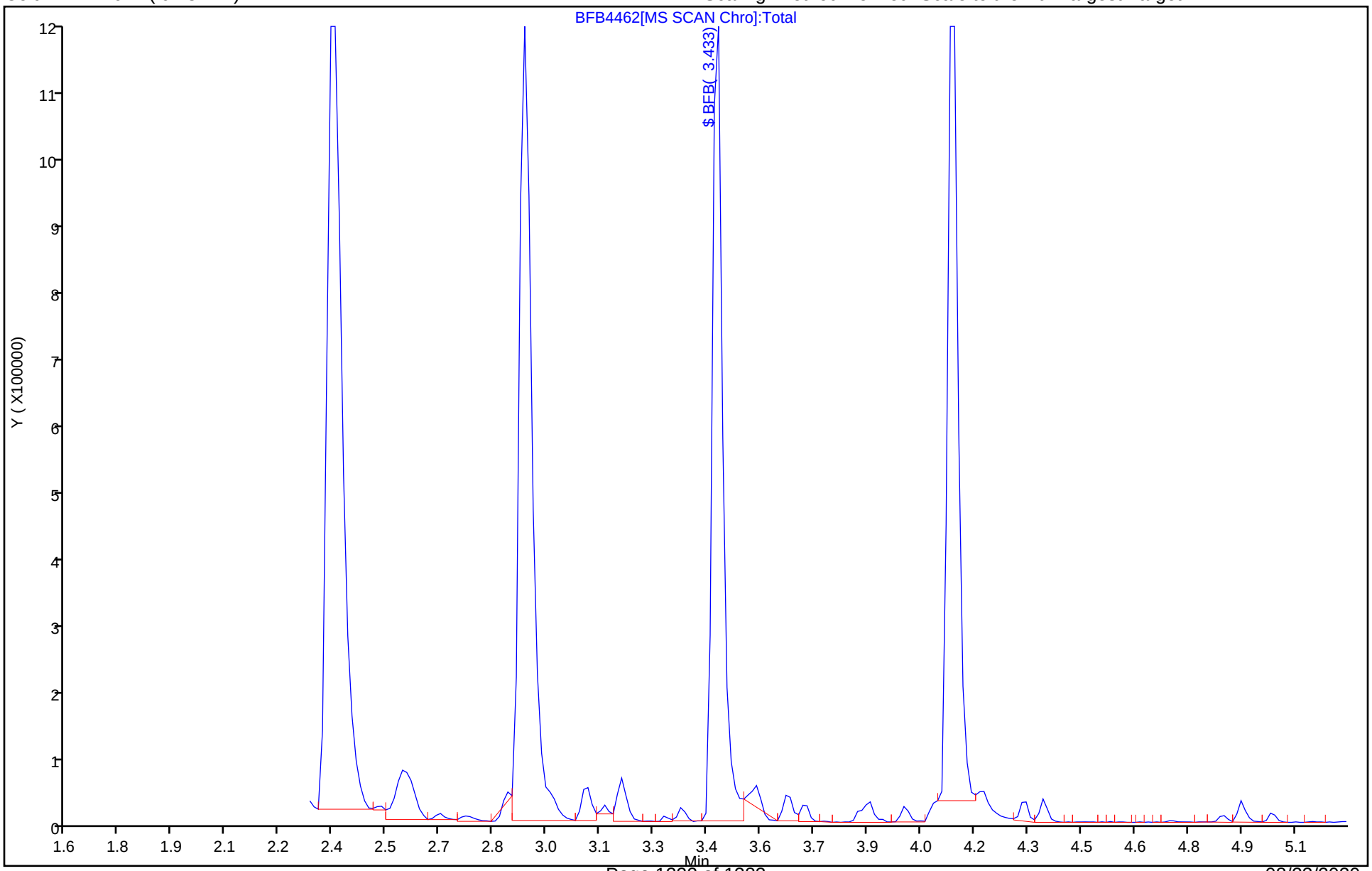
Report Date: 19-Aug-2020 15:32:56 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\BFB4462.D

Injection Date:	19-Aug-2020 15:23:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	24-Jul-2018 17:22:19	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0078277-001				
Operator ID:	001904	Instrument ID:	A3UX19		
Method:	\\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	24-Jul-2018 18:26:01	Calib Date:	01-Jan-0001 00:00:00		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK002				
First Level Reviewer: laveyt		Date:	24-Jul-2018 18:26:01		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.698	4.698	0.000	0	1090680	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d

Injection Date: 24-Jul-2018 17:22:19 Instrument ID: A3UX19

Lims ID: BFB

Client ID:

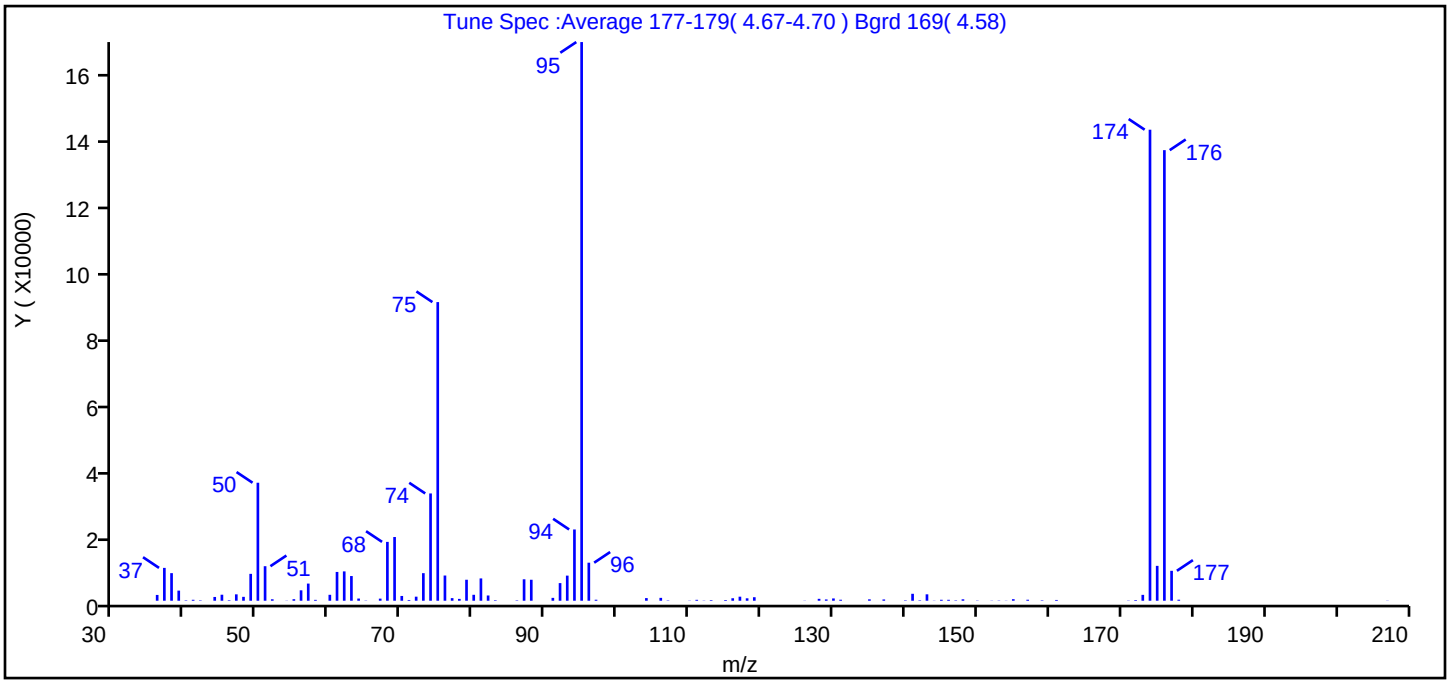
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.1
75	30 to 60% of m/z 95	53.5
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	1.1 (1.2)
174	50 to 120% of m/z 95	84.3
175	5 to 9% of m/z 174	6.2 (7.4)
176	Greater than 95% but less than 101% of m/z 174	80.7 (95.7)
177	5 to 9% of m/z 176	5.4 (6.6)

Report Date: 24-Jul-2018 18:26:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d\8260_19.rslt\spectra.d

Injection Date: 24-Jul-2018 17:22:19

Spectrum: Tune Spec :Average 177-179(4.67-4.70) Bgrd 169(4.58)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1706	64.00	645	94.00	20976	142.00	135
37.00	9667	65.00	75	95.00	164416	143.00	1887
38.00	8121	67.00	620	96.00	11195	144.00	54
39.00	2976	68.00	17320	97.00	297	145.00	282
40.00	128	69.00	18752	104.00	777	146.00	275
41.00	280	70.00	1405	106.00	846	147.00	123
42.00	120	71.00	220	107.00	102	148.00	420
44.00	1112	72.00	1196	110.00	66	150.00	76
45.00	1770	73.00	8112	111.00	269	152.00	57
46.00	157	74.00	31576	112.00	68	153.00	83
47.00	1883	75.00	87888	113.00	186	154.00	50
48.00	1146	76.00	7419	115.00	214	155.00	454
49.00	7909	77.00	768	116.00	734	157.00	295
50.00	34728	78.00	542	117.00	1191	159.00	132
51.00	10164	79.00	6178	118.00	715	161.00	228
52.00	428	80.00	1749	119.00	1035	171.00	76
54.00	52	81.00	6569	126.00	50	172.00	196
55.00	455	82.00	1544	128.00	562	173.00	1730
56.00	3065	83.00	158	129.00	380	174.00	138624
57.00	5049	86.00	123	130.00	675	175.00	10263
58.00	260	87.00	6315	131.00	295	176.00	132608
60.00	1747	88.00	6174	135.00	411	177.00	8811
61.00	8473	91.00	844	137.00	377	178.00	300
62.00	8634	92.00	5187	140.00	129	207.00	54
63.00	7267	93.00	7390	141.00	2044		

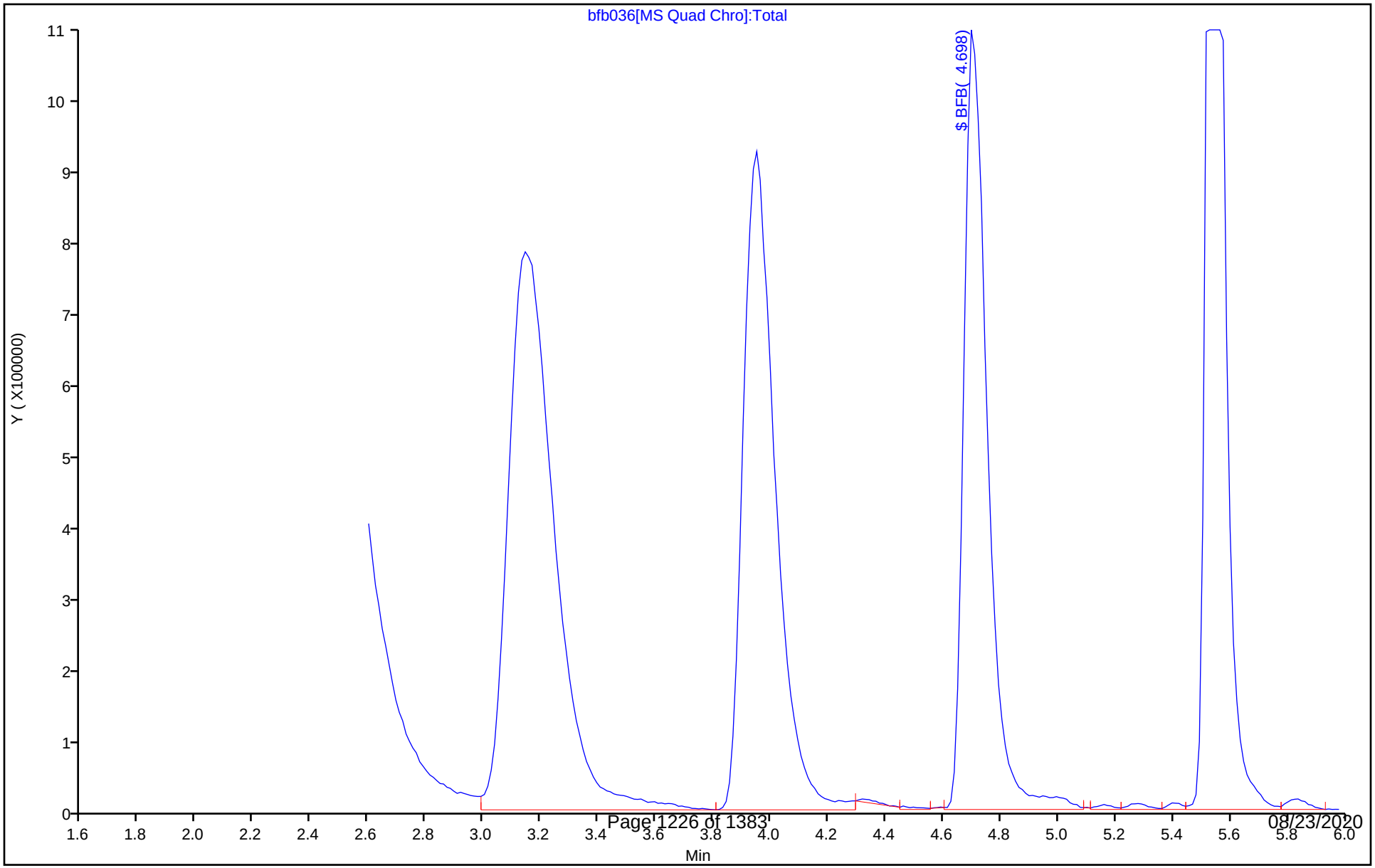
Report Date: 24-Jul-2018 18:26:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d

Injection Date:	24-Jul-2018 17:22:19	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	25-Jul-2018 11:28:13	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0078311-001				
Operator ID:	001904	Instrument ID:	A3UX19		
Method:	\\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	25-Jul-2018 16:32:06	Calib Date:	25-Jul-2018 15:15:13		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK026				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.686	4.686	0.000	0	1106546	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d

Injection Date: 25-Jul-2018 11:28:13 Instrument ID: A3UX19

Lims ID: BFB

Client ID:

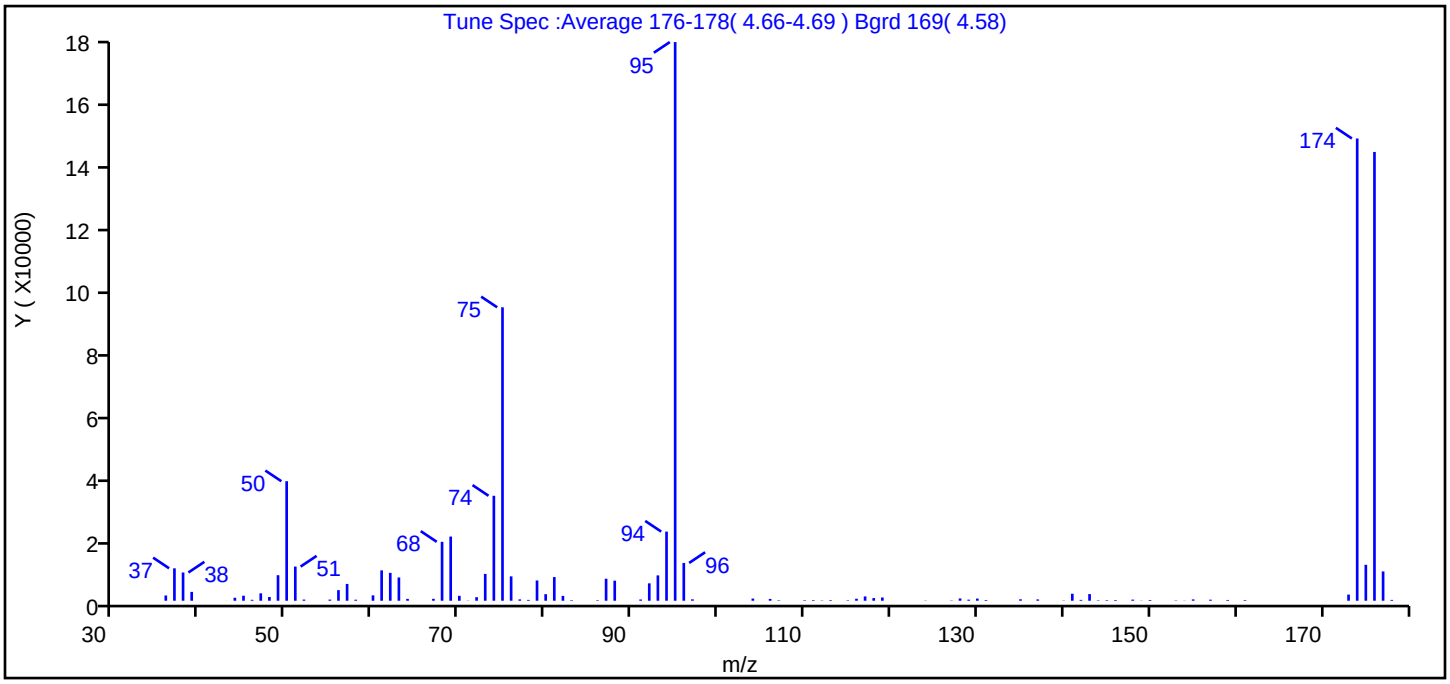
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.4
75	30 to 60% of m/z 95	52.5
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	1.1 (1.3)
174	50 to 120% of m/z 95	82.7
175	5 to 9% of m/z 174	6.4 (7.8)
176	Greater than 95% but less than 101% of m/z 174	80.3 (97.1)
177	5 to 9% of m/z 176	5.2 (6.5)

Report Date: 25-Jul-2018 16:32:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d\8260_19.rslt\spectra.d

Injection Date: 25-Jul-2018 11:28:13

Spectrum: Tune Spec :Average 176-178(4.66-4.69) Bgrd 169(4.58)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1628	67.00	581	94.00	21384	137.00	409
37.00	10027	68.00	18224	95.00	172800	140.00	80
38.00	8737	69.00	19856	96.00	11689	141.00	2163
39.00	2738	70.00	1521	97.00	441	142.00	263
43.00	20	71.00	65	104.00	670	143.00	2064
44.00	922	72.00	1099	106.00	557	144.00	132
45.00	1551	73.00	8295	107.00	144	145.00	176
46.00	292	74.00	32464	110.00	165	146.00	215
47.00	2293	75.00	90760	111.00	202	148.00	348
48.00	1156	76.00	7539	112.00	94	149.00	57
49.00	7894	77.00	416	113.00	196	150.00	232
50.00	36968	78.00	262	115.00	145	153.00	106
51.00	10570	79.00	6264	116.00	614	154.00	54
52.00	361	80.00	2025	117.00	1332	155.00	412
55.00	352	81.00	7320	118.00	827	157.00	327
56.00	3282	82.00	1495	119.00	1001	159.00	239
57.00	5195	83.00	170	124.00	70	161.00	201
58.00	322	86.00	159	127.00	96	173.00	1900
60.00	1660	87.00	6806	128.00	700	174.00	142976
61.00	9391	88.00	6205	129.00	329	175.00	11113
62.00	8617	91.00	385	130.00	667	176.00	138816
63.00	7197	92.00	5382	131.00	228	177.00	9062
64.00	572	93.00	7843	135.00	442	178.00	262

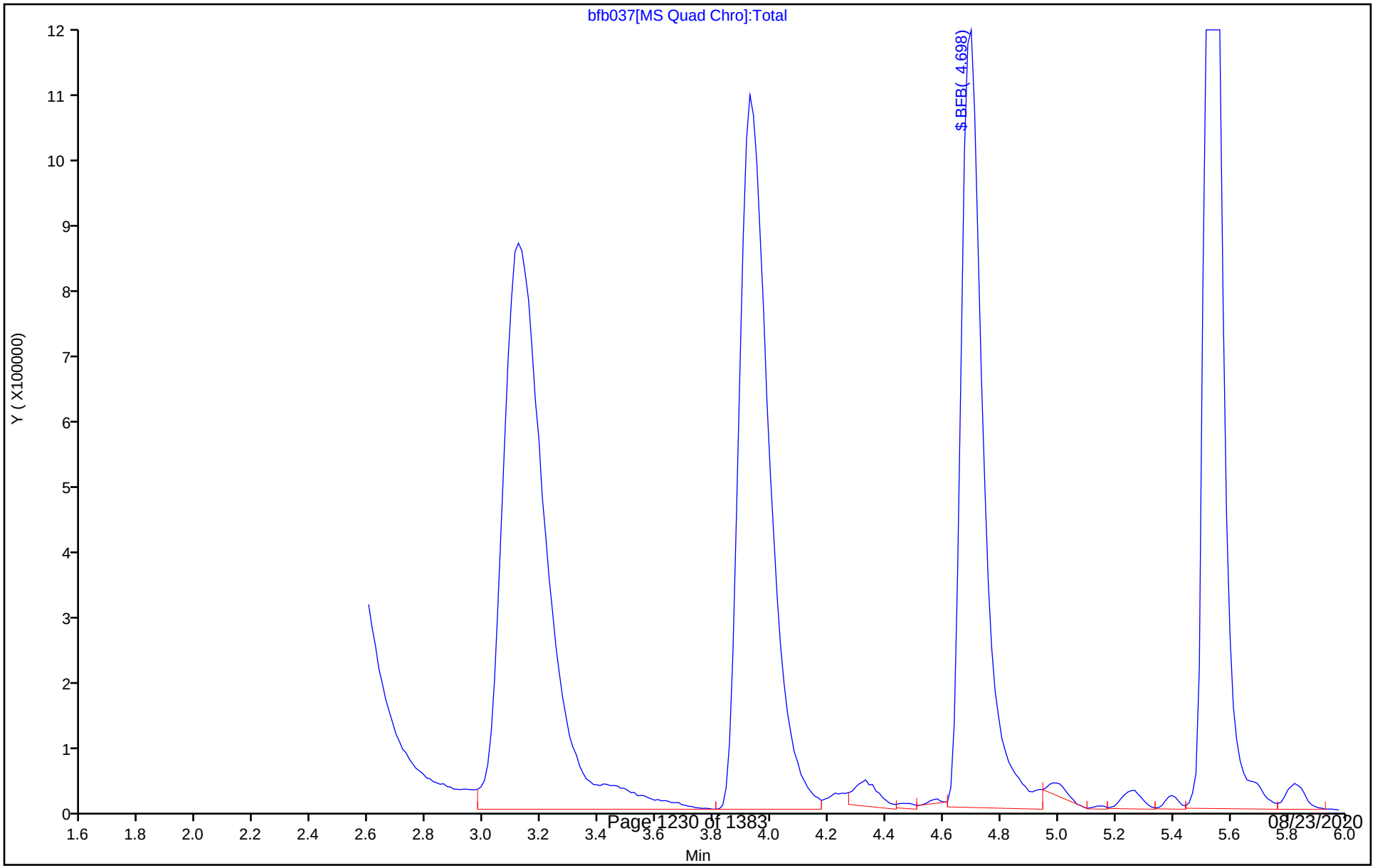
Report Date: 25-Jul-2018 16:32:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d

Injection Date:	25-Jul-2018 11:28:13	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	27-Aug-2018 16:23:35	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0079307-001				
Operator ID:	001904	Instrument ID:	A3UX19		
Method:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	27-Aug-2018 20:00:43	Calib Date:	27-Aug-2018 19:23:28		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK010				
First Level Reviewer: laveyt		Date:	27-Aug-2018 19:59:46		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.698	4.698	0.000	0	1569511	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d

Injection Date: 27-Aug-2018 16:23:35 Instrument ID: A3UX19

Lims ID: BFB

Client ID:

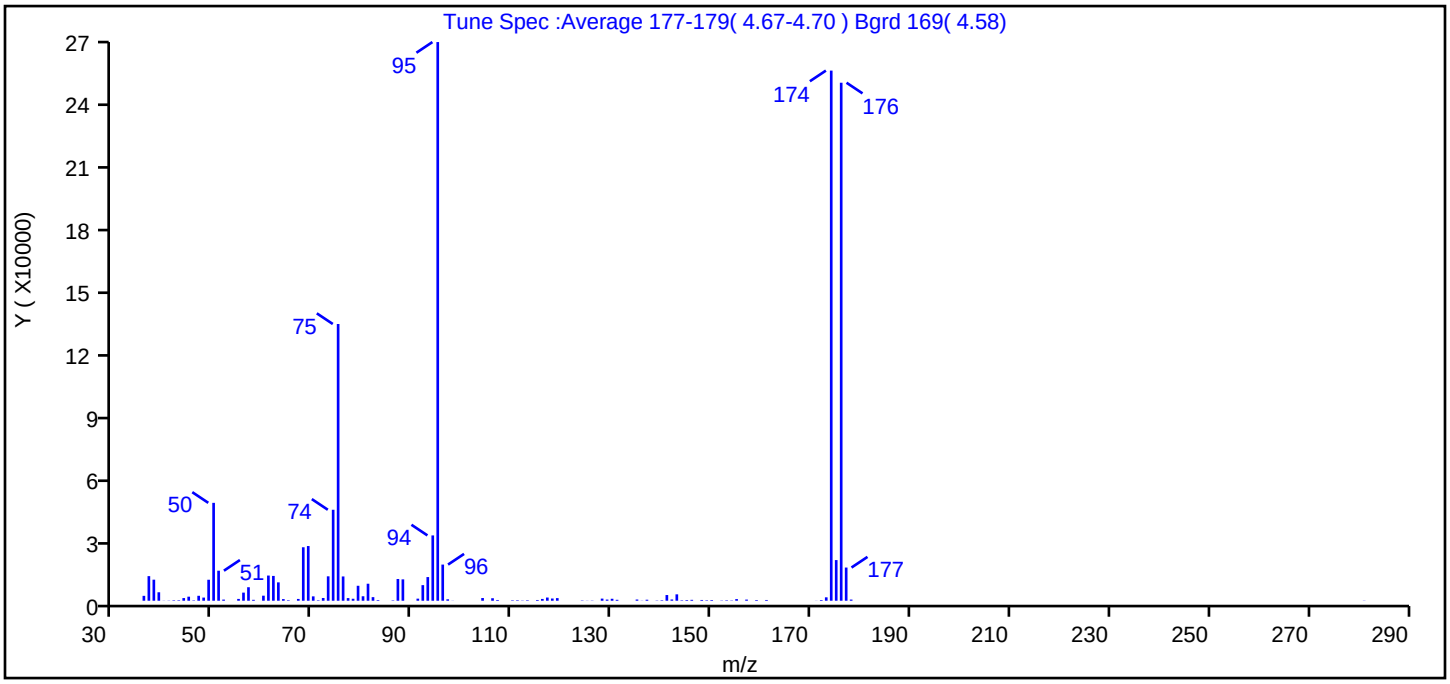
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.5
75	30 to 60% of m/z 95	49.5
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.6 (0.6)
174	50 to 120% of m/z 95	94.9
175	5 to 9% of m/z 174	7.3 (7.7)
176	Greater than 95% but less than 101% of m/z 174	92.7 (97.7)
177	5 to 9% of m/z 176	5.9 (6.4)

Report Date: 27-Aug-2018 20:00:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d\8260_19.rslt\spectra.d

Injection Date: 27-Aug-2018 16:23:35

Spectrum: Tune Spec :Average 177-179(4.67-4.70) Bgrd 169(4.58)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2349	65.00	256	96.00	17360	140.00	251
37.00	11809	67.00	862	97.00	688	141.00	2734
38.00	10107	68.00	25672	98.00	58	142.00	600
39.00	4064	69.00	26264	104.00	1300	143.00	3067
40.00	66	70.00	2099	106.00	1203	144.00	221
41.00	100	71.00	235	107.00	359	145.00	322
42.00	232	72.00	1321	110.00	224	146.00	434
43.00	243	73.00	11723	111.00	256	148.00	370
44.00	1279	74.00	43680	112.00	119	149.00	227
45.00	1945	75.00	132864	113.00	246	150.00	326
46.00	198	76.00	11659	115.00	360	152.00	127
47.00	2373	77.00	1269	116.00	866	153.00	224
48.00	1513	78.00	954	117.00	1530	154.00	142
49.00	10079	79.00	7185	118.00	1063	155.00	786
50.00	47000	80.00	2148	119.00	1259	157.00	556
51.00	14416	81.00	8168	124.00	158	159.00	325
52.00	549	82.00	1723	125.00	69	161.00	362
55.00	872	83.00	325	126.00	112	171.00	51
56.00	3900	86.00	204	128.00	1021	172.00	331
57.00	6486	87.00	10430	129.00	555	173.00	1639
58.00	440	88.00	10260	130.00	946	174.00	254528
60.00	2424	91.00	1000	131.00	447	175.00	19520
61.00	12091	92.00	7487	135.00	583	176.00	248704
62.00	11912	93.00	11359	136.00	73	177.00	15935
63.00	8822	94.00	31360	137.00	488	178.00	556
64.00	782	95.00	268224	139.00	133	281.00	85

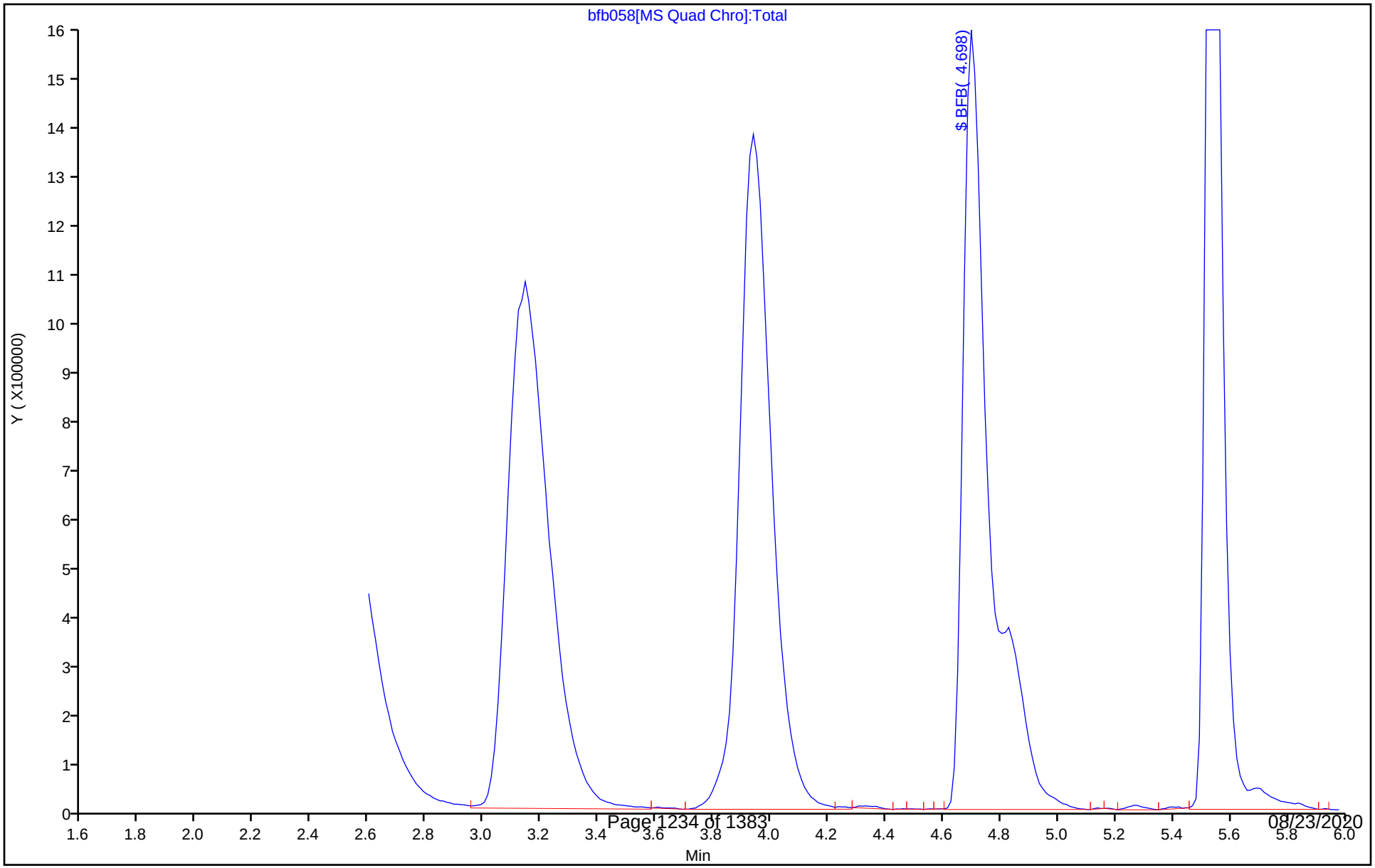
Report Date: 27-Aug-2018 20:00:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d

Injection Date:	27-Aug-2018 16:23:35	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\bfb599.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 14-Aug-2020 17:20:36 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-001
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 18:37:04 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 18:37:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.703	4.703	0.000	0	1564181	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

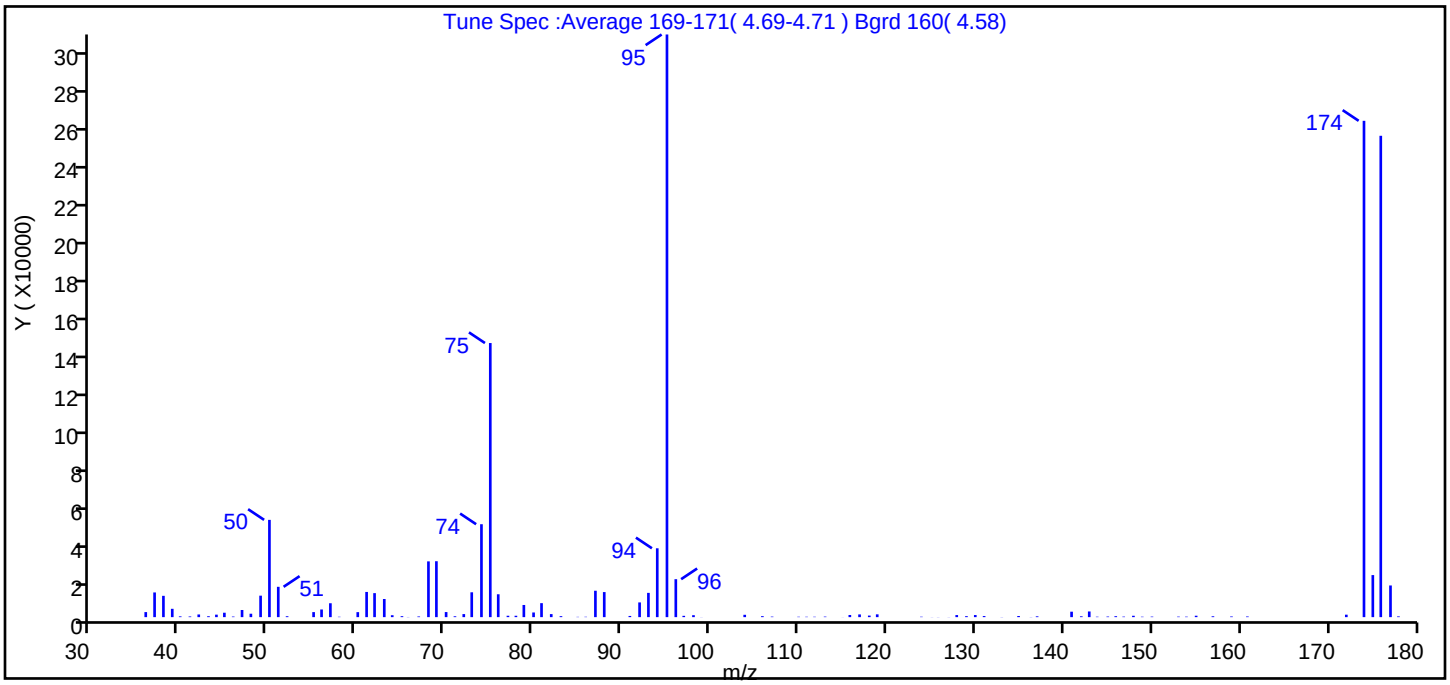
vmbfb_00025 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\bfb599.d
Injection Date: 14-Aug-2020 17:20:36 Instrument ID: A3UX19
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.7
75	30 to 60% of m/z 95	47.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.2
175	5 to 9% of m/z 174	7.2 (8.5)
176	Greater than 95% but less than 101% of m/z 174	82.6 (97.0)
177	5 to 9% of m/z 176	5.4 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\bfb599.d\8260_19.rslt\spectra.d
Injection Date: 14-Aug-2020 17:20:36
Spectrum: Tune Spec :Average 169-171(4.69-4.71) Bgrd 160(4.58)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2655	65.00	500	94.00	36192	133.00	75
37.00	12982	66.00	82	95.00	306240	135.00	587
38.00	11201	67.00	355	96.00	19952	136.00	73
39.00	4380	68.00	29312	97.00	689	137.00	427
40.00	405	69.00	29392	98.00	1023	141.00	2866
41.00	353	70.00	2674	99.00	51	142.00	436
42.00	1406	71.00	453	104.00	1234	143.00	2985
43.00	477	72.00	1609	106.00	511	144.00	234
44.00	1309	73.00	13061	107.00	278	145.00	315
45.00	2326	74.00	48840	110.00	211	146.00	499
46.00	307	75.00	144064	111.00	206	147.00	280
47.00	3757	76.00	12024	112.00	206	148.00	721
48.00	1798	77.00	734	113.00	285	149.00	227
49.00	11292	78.00	730	115.00	35	150.00	281
50.00	51128	79.00	6394	116.00	1134	153.00	276
51.00	15942	80.00	2451	117.00	1427	154.00	259
52.00	481	81.00	7353	118.00	827	155.00	745
55.00	2648	82.00	1603	119.00	1472	157.00	452
56.00	4024	83.00	514	124.00	225	159.00	349
57.00	7304	85.00	151	125.00	50	161.00	349
58.00	201	86.00	194	126.00	61	172.00	1296
60.00	2630	87.00	13877	127.00	56	174.00	260864
61.00	13244	88.00	13173	128.00	1086	175.00	22104
62.00	12619	91.00	626	129.00	518	176.00	252992
63.00	9535	92.00	7740	130.00	1098	177.00	16648
64.00	1011	93.00	12756	131.00	566	178.00	396

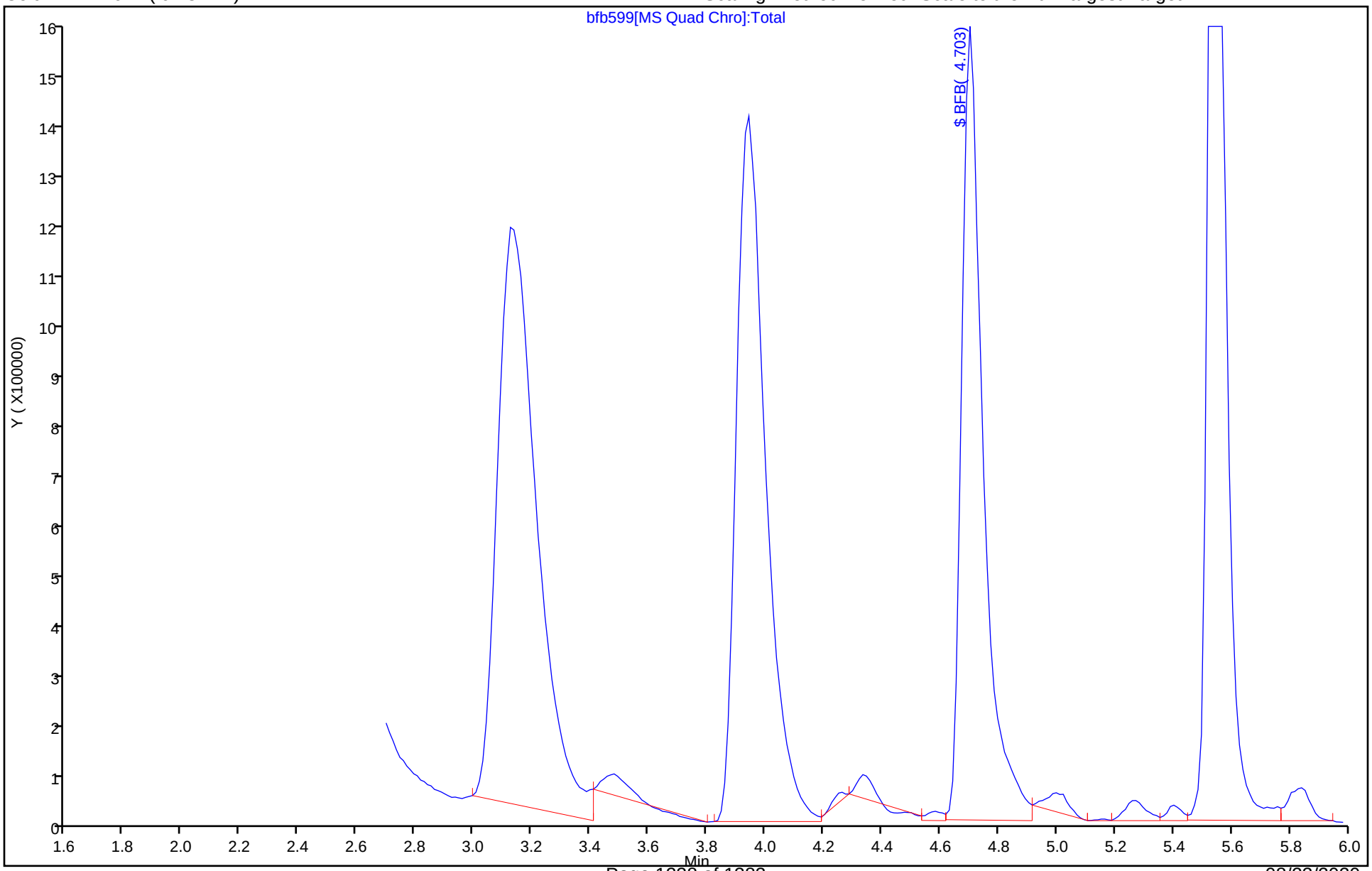
Report Date: 14-Aug-2020 18:37:05 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\bfb599.d

Injection Date:	14-Aug-2020 17:20:36	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\bfb600.d				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	17-Aug-2020 17:02:05	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	240-0101080-001				
Operator ID:	001904	Instrument ID:	A3UX19		
Method:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m				
Limit Group:	MSV 8260C ICAL				
Last Update:	17-Aug-2020 17:24:48	Calib Date:	09-Jun-2020 21:22:13		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1048				
First Level Reviewer: laveyt		Date:	17-Aug-2020 17:24:48		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.703	4.703	0.000	0	1467832	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

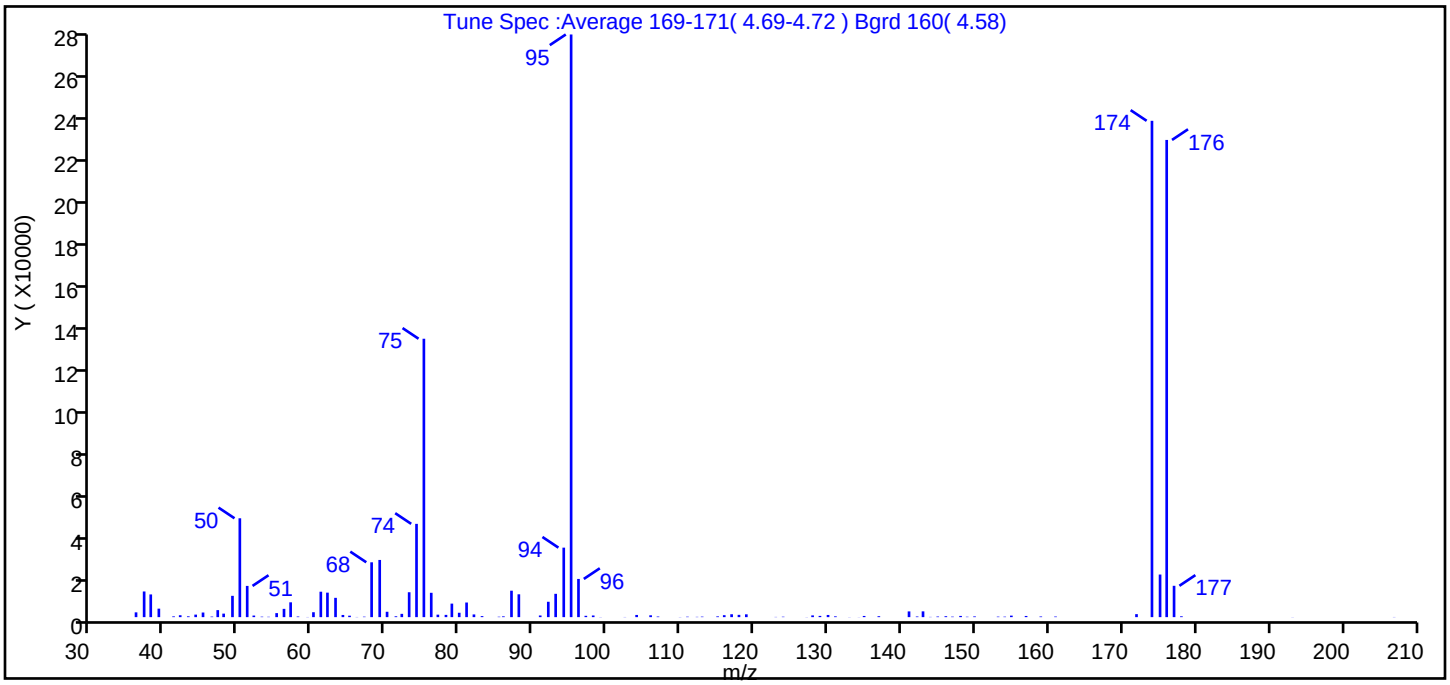
vmbfb_00025 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File:	\\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\bfb600.d				
Injection Date:	17-Aug-2020 17:02:05	Instrument ID:	A3UX19		
Lims ID:	BFB				
Client ID:					
Operator ID:	001904	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	8260_19	Limit Group:	MSV 8260C ICAL		
Tune Method:	BFB Method 8260				

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.0
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.2
175	5 to 9% of m/z 174	7.3 (8.6)
176	Greater than 95% but less than 101% of m/z 174	81.9 (96.1)
177	5 to 9% of m/z 176	5.4 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\bfb600.d\8260_19.rslt\spectra.d
Injection Date: 17-Aug-2020 17:02:05
Spectrum: Tune Spec :Average 169-171(4.69-4.72) Bgrd 160(4.58)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 108

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2280	64.00	1035	94.00	33024	134.00	50
37.00	12198	65.00	697	95.00	276864	135.00	564
38.00	10790	66.00	82	96.00	18152	137.00	441
39.00	4038	67.00	224	97.00	635	141.00	2728
41.00	363	68.00	26064	98.00	787	142.00	313
42.00	906	69.00	27176	99.00	70	143.00	2752
43.00	387	70.00	2556	102.00	76	144.00	115
44.00	1201	71.00	409	104.00	1044	145.00	289
45.00	2198	72.00	1567	106.00	878	146.00	440
46.00	265	73.00	11830	107.00	287	147.00	238
47.00	3333	74.00	44328	110.00	70	148.00	582
48.00	1673	75.00	132288	111.00	212	149.00	191
49.00	10125	76.00	11569	112.00	138	150.00	345
50.00	46976	77.00	1180	113.00	245	153.00	243
51.00	14841	78.00	1076	115.00	365	154.00	230
52.00	756	79.00	6428	116.00	930	155.00	724
53.00	223	80.00	2085	117.00	1378	157.00	561
54.00	167	81.00	6950	118.00	1091	159.00	312
55.00	1914	82.00	1292	119.00	1341	161.00	284
56.00	3934	83.00	490	123.00	106	172.00	1430
57.00	7046	85.00	198	124.00	206	174.00	235840
58.00	302	86.00	371	127.00	59	175.00	20248
59.00	77	87.00	12566	128.00	829	176.00	226752
60.00	2336	88.00	10853	129.00	595	177.00	14894
61.00	12083	91.00	785	130.00	1035	178.00	397
62.00	11640	92.00	7305	131.00	381	193.00	53
63.00	9172	93.00	11081	133.00	62	207.00	79

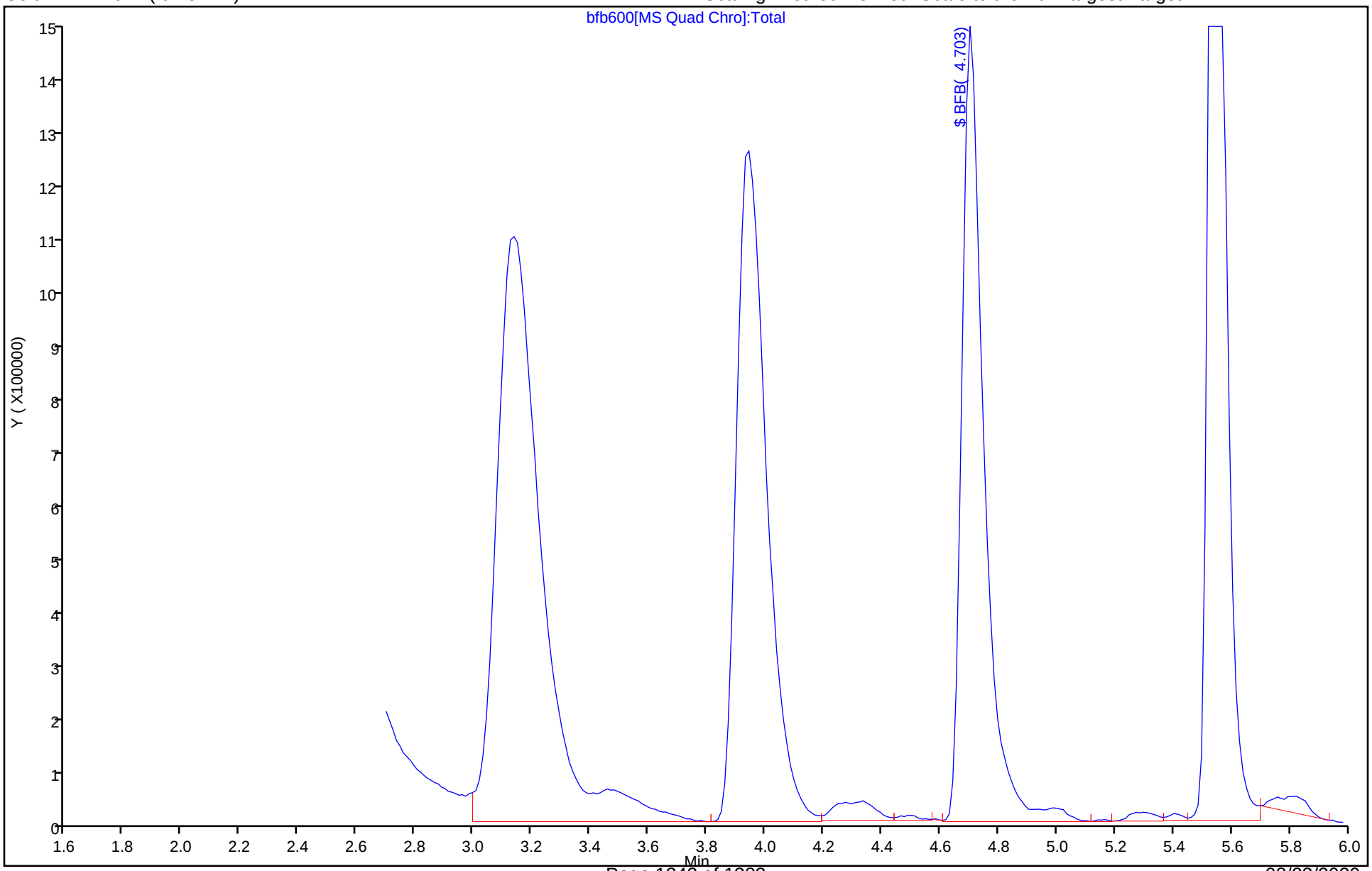
Report Date: 17-Aug-2020 17:24:48 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\bfb600.d

Injection Date:	17-Aug-2020 17:02:05	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\bfb601.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 18-Aug-2020 18:41:46 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-001
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:29:34 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 19:29:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.703	4.703	0.000	0	1487646	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

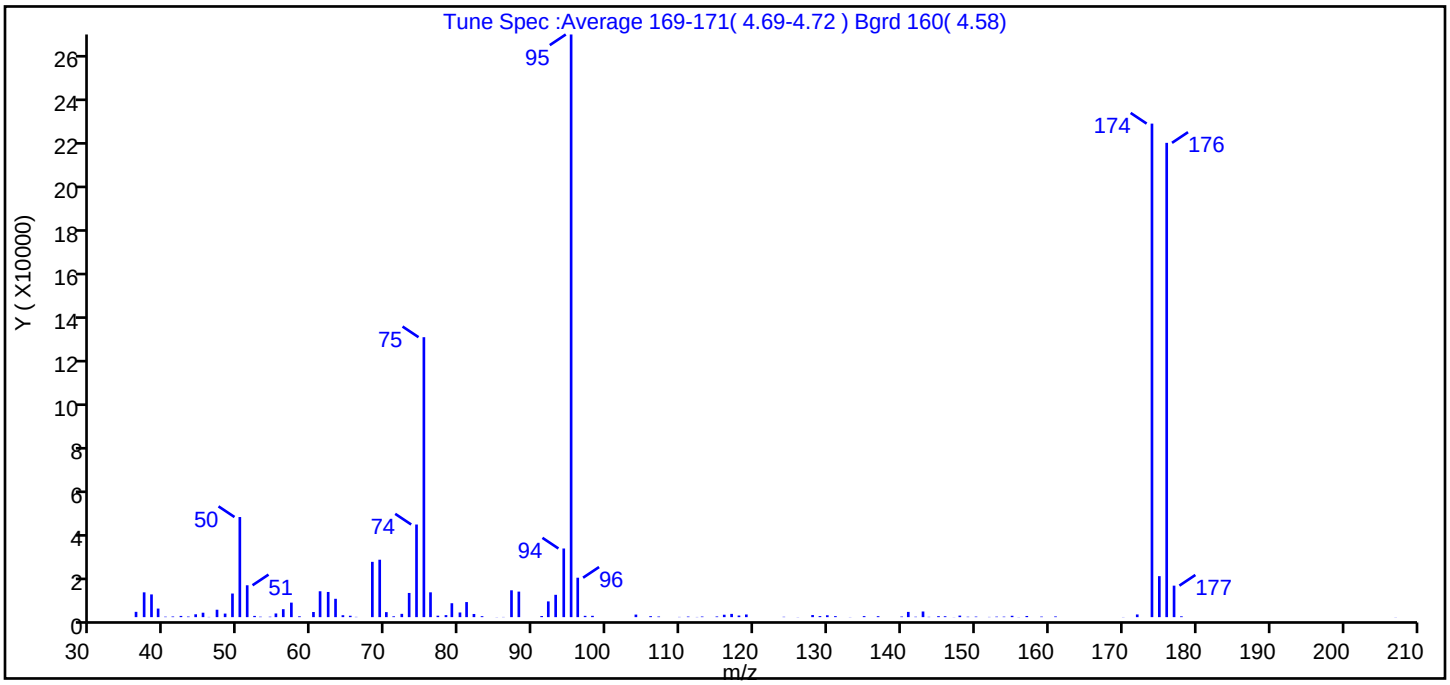
vmbfb_00025 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\bfb601.d
Injection Date: 18-Aug-2020 18:41:46 Instrument ID: A3UX19
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	48.0
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	84.7
175	5 to 9% of m/z 174	7.0 (8.3)
176	Greater than 95% but less than 101% of m/z 174	81.4 (96.1)
177	5 to 9% of m/z 176	5.4 (6.6)

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\bfb601.d\8260_19.rslt\spectra.d
Injection Date: 18-Aug-2020 18:41:46
Spectrum: Tune Spec :Average 169-171(4.69-4.72) Bgrd 160(4.58)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 106

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2456	64.00	890	95.00	269440	142.00	190
37.00	11472	65.00	647	96.00	18232	143.00	2613
38.00	10513	66.00	123	97.00	605	144.00	149
39.00	3967	68.00	25576	98.00	613	145.00	444
40.00	215	69.00	26552	104.00	1185	146.00	416
41.00	301	70.00	2319	106.00	457	147.00	55
42.00	567	71.00	385	107.00	290	148.00	709
43.00	272	72.00	1523	110.00	107	149.00	190
44.00	1323	73.00	11187	111.00	270	150.00	259
45.00	2049	74.00	42840	112.00	86	152.00	107
46.00	101	75.00	129456	113.00	280	153.00	238
47.00	3431	76.00	11478	115.00	325	154.00	229
48.00	1649	77.00	668	116.00	1118	155.00	631
49.00	10919	78.00	925	117.00	1505	156.00	64
50.00	46296	79.00	6434	118.00	747	157.00	533
51.00	14741	80.00	2160	119.00	1226	159.00	249
52.00	573	81.00	6974	124.00	161	161.00	331
53.00	204	82.00	1465	126.00	64	170.00	70
54.00	195	83.00	447	128.00	969	172.00	1245
55.00	1703	85.00	65	129.00	486	174.00	228224
56.00	3688	86.00	92	130.00	862	175.00	18952
57.00	6717	87.00	12416	131.00	471	176.00	219328
58.00	376	88.00	11806	133.00	70	177.00	14569
60.00	2373	91.00	510	135.00	476	178.00	374
61.00	11966	92.00	7285	137.00	436	207.00	58
62.00	11645	93.00	10325	140.00	280		
63.00	8485	94.00	31744	141.00	2423		

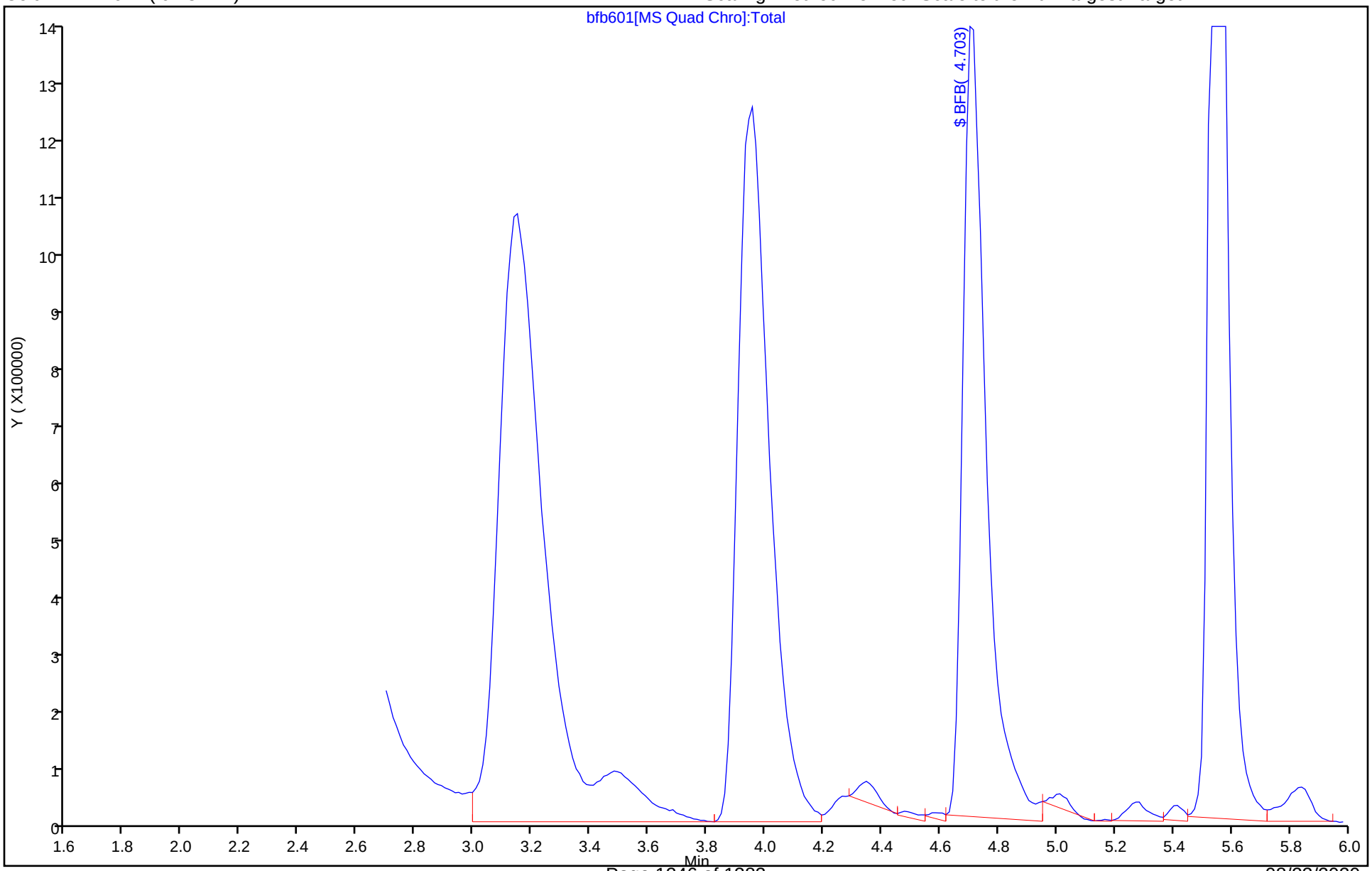
Report Date: 18-Aug-2020 19:29:35 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\bfb601.d

Injection Date:	18-Aug-2020 18:41:46	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	96		47-134
2037-26-5	Toluene-d8 (Surr)	106		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447281/8

Matrix: Water Lab File ID: U1916365.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 19:36

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.: 447281 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

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

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916365.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Aug-2020 19:36:21 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 18:15:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 20:26:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	958064	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	707631	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	352282	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	269622	20.0	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	304807	20.0	20.6	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	902857	20.0	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	305887	20.0	19.2	
9 Dichlorodifluoromethane	85		1.598					ND	
10 Chloromethane	50		1.812					ND	
12 Vinyl chloride	62		1.907					ND	
11 Butadiene	54		1.918					ND	
14 1-Chloro-1-fluoroethane TIC	47		2.215					ND	
13 Bromomethane	94		2.250					ND	
15 Chloroethane	64		2.310					ND	
16 Dichlorofluoromethane	67		2.523					ND	
17 Trichlorofluoromethane	101		2.535					ND	
18 Ethyl ether	59		2.808					ND	
19 Acrolein	56		2.926					ND	
20 1,1-Dichloroethene	61		3.033					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069					ND	
22 Acetone	43	3.080	3.081	-0.001	99	8119		2.16	
23 Methylal	45	3.104	3.092	0.012	54	2482		0.1285	
24 Iodomethane	142		3.175					ND	
25 Carbon disulfide	76		3.247					ND	
26 Acetonitrile	41	3.341	3.329	0.012	52	2496		4.31	
27 3-Chloro-1-propene	41		3.365					ND	
28 Methyl acetate	43		3.389					ND	
29 Methylene Chloride	49	3.484	3.472	0.012	88	6883		0.5048	
30 2-Methyl-2-propanol	59		3.579					ND	
31 Acrylonitrile	53	3.709	3.697	0.012	81	1044		0.2167	
32 trans-1,2-Dichloroethene	61		3.733					ND	
33 Methyl tert-butyl ether	73		3.733					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	57		3.982					ND	
35 1,1-Dichloroethane	63		4.112					ND	
36 Vinyl acetate	43		4.148					ND	
37 Isopropyl ether	87		4.171					ND	
38 2-Chloro-1,3-butadiene	53		4.195					ND	
39 Tert-butyl ethyl ether	59		4.491					ND	
41 cis-1,2-Dichloroethene	96		4.634					ND	
40 2-Butanone (MEK)	72		4.634					ND	
42 2,2-Dichloropropane	77		4.634					ND	
44 Ethyl acetate	43		4.681					ND	
43 Propionitrile	54		4.681					ND	
45 Methacrylonitrile	41		4.824					ND	
46 Chlorobromomethane	49		4.847					ND	
47 Tetrahydrofuran	42		4.883					ND	
48 Chloroform	83		4.907					ND	
49 1,1,1-Trichloroethane	97		5.085					ND	
50 Cyclohexane	84		5.144					ND	
51 1,1-Dichloropropene	75		5.227					ND	
52 Carbon tetrachloride	117		5.239					ND	
53 Isobutyl alcohol	41		5.298					ND	
54 Benzene	78		5.417					ND	
55 1,2-Dichloroethane	62		5.429					ND	
56 Tert-amyl methyl ether	73		5.511					ND	
57 n-Heptane	57		5.642					ND	
58 n-Butanol	56		5.891					ND	
59 Trichloroethene	130		5.998					ND	
60 Ethyl acrylate	55		6.069					ND	
61 Methylcyclohexane	83		6.176					ND	
62 1,2-Dichloropropane	63		6.199					ND	
63 Methyl methacrylate	41		6.282					ND	
65 1,4-Dioxane	88		6.306					ND	
64 Dibromomethane	174		6.306					ND	
66 Dichlorobromomethane	83		6.437					ND	
67 2-Nitropropane	41		6.638					ND	
68 2-Chloroethyl vinyl ether	63		6.697					ND	
69 cis-1,3-Dichloropropene	75		6.852					ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982					ND	
71 Toluene	91		7.172					ND	
72 trans-1,3-Dichloropropene	75		7.361					ND	
73 Ethyl methacrylate	69		7.445					ND	
74 1,1,2-Trichloroethane	97		7.539					ND	
75 Tetrachloroethene	166		7.705					ND	
76 1,3-Dichloropropane	76		7.705					ND	
77 2-Hexanone	43		7.777					ND	
78 n-Butyl acetate	43		7.895					ND	
80 Tetrahydrothiophene	60		7.931					ND	
79 Chlorodibromomethane	129		7.931					ND	
81 Ethylene Dibromide	107		8.049					ND	
82 1-Chlorohexane	91		8.500					ND	
83 Chlorobenzene	112		8.536					ND	
84 1,1,1,2-Tetrachloroethane	131		8.607					ND	
85 Ethylbenzene	106		8.642					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106		8.749					ND	
87 o-Xylene	106		9.152					ND	
88 Styrene	104		9.164					ND	
89 Bromoform	173		9.354					ND	
90 Isopropylbenzene	105		9.532					ND	
91 Cyclohexanone	55		9.626					ND	
92 1,4-Dichlorobutane	55		9.626					ND	
93 1,1,2,2-Tetrachloroethane	83		9.816					ND	
95 Bromobenzene	156		9.852					ND	
96 1,2,3-Trichloropropane	110		9.876					ND	
97 trans-1,4-Dichloro-2-butene	53		9.876					ND	
98 N-Propylbenzene	120		9.947					ND	
94 3-Ethyltoluene	105		10.041					ND	
100 2-Chlorotoluene	126		10.042					ND	
101 1,3,5-Trimethylbenzene	105		10.136					ND	
102 4-Chlorotoluene	126		10.160					ND	
99 2-Ethyltoluene	105		10.350					ND	
103 tert-Butylbenzene	119		10.480					ND	
104 Pentachloroethane	167		10.492					ND	
105 1,2,4-Trimethylbenzene	105		10.528					ND	
106 sec-Butylbenzene	105		10.706					ND	
107 1,3-Dichlorobenzene	146		10.824					ND	
108 4-Isopropyltoluene	119		10.860					ND	
109 1,4-Dichlorobenzene	146		10.919					ND	
110 1,2,3-Trimethylbenzene	105		10.966					ND	
111 Benzyl chloride	91		11.049					ND	
112 n-Butylbenzene	91		11.287					ND	
113 1,2-Dichlorobenzene	146		11.310					ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129					ND	
115 1,3,5-Trichlorobenzene	180		12.366					ND	
116 1,2,4-Trichlorobenzene	180		13.018					ND	
117 Hexachlorobutadiene	225		13.208					ND	
118 Naphthalene	128		13.279					ND	
119 1,2,3-Trichlorobenzene	180		13.552					ND	
120 2-Methylnaphthalene	142		14.631					ND	
122 Ethylene oxide	1		-0.010					ND	
123 Propene oxide	1		-0.010					ND	
121 Epichlorohydrin	1		-0.010					ND	
S 125 Trihalomethanes, Total	1		-0.010					ND	
S 124 Total BTEX	1		-0.010					ND	
S 126 1,2-Dichloroethene, Total	96		1.130					ND	
S 127 1,3-Dichloropropene, Total	75		6.750					ND	
S 128 Xylenes, Total	106		16.520					ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

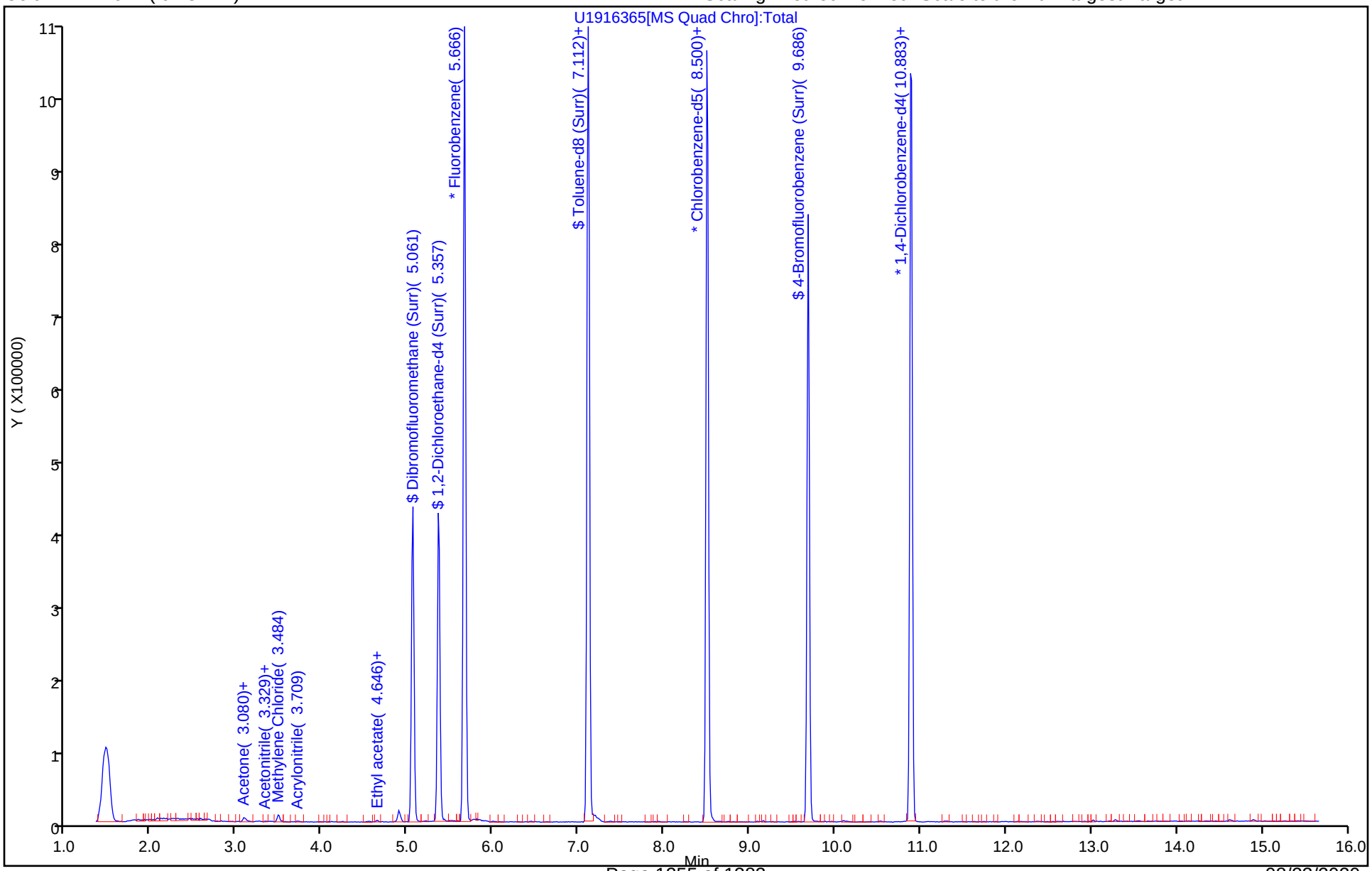
Report Date: 14-Aug-2020 20:26:01 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916365.d

Injection Date:	14-Aug-2020 19:36:21	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916365.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Aug-2020 19:36:21 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 18:15:44 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 20:26:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.54
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.6	102.90
$ 6 Toluene-d8 (Surr)	20.0	21.3	106.39
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.2	95.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	96		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	104		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447506/8

Matrix: Water Lab File ID: U1916395.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 19:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

Number TICs Found: 1 TIC Result Total: 6.22

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
109-99-9	Tetrahydrofuran	4.90	6.22		82%

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916395.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-Aug-2020 19:16:11 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 19:48:34 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 19:48:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	945687	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	683222	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	95	346340	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	94	265705	20.0	20.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	303911	20.0	20.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	882090	20.0	21.5	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	296593	20.0	19.2	
9 Dichlorodifluoromethane	85		1.610					ND	
10 Chloromethane	50		1.823					ND	
12 Vinyl chloride	62		1.918					ND	
11 Butadiene	54		1.918					ND	
14 1-Chloro-1-fluoroethane TIC	47		2.215					ND	
13 Bromomethane	94		2.250					ND	
15 Chloroethane	64		2.321					ND	
16 Dichlorofluoromethane	67		2.523					ND	
17 Trichlorofluoromethane	101		2.547					ND	
18 Ethyl ether	59		2.820					ND	
19 Acrolein	56		2.938					ND	
20 1,1-Dichloroethene	61		3.033					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069					ND	
22 Acetone	43	3.092	3.080	0.012	99	4631		1.25	
23 Methylal	45		3.092					ND	
24 Iodomethane	142		3.187					ND	
25 Carbon disulfide	76		3.246					ND	
26 Acetonitrile	41		3.330					ND	U
27 3-Chloro-1-propene	41		3.377					ND	
28 Methyl acetate	43		3.389					ND	
29 Methylene Chloride	49	3.484	3.484	0.000	84	2714		0.2016	
30 2-Methyl-2-propanol	59		3.590					ND	
31 Acrylonitrile	53	3.709	3.697	0.012	65	1049		0.2206	
32 trans-1,2-Dichloroethene	61		3.744					ND	
33 Methyl tert-butyl ether	73		3.744					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	57		3.994					ND	
35 1,1-Dichloroethane	63		4.124					ND	
36 Vinyl acetate	43		4.160					ND	
37 Isopropyl ether	87		4.171					ND	
38 2-Chloro-1,3-butadiene	53		4.195					ND	
39 Tert-butyl ethyl ether	59		4.492					ND	
41 cis-1,2-Dichloroethene	96		4.634					ND	
40 2-Butanone (MEK)	72		4.634					ND	
42 2,2-Dichloropropane	77		4.646					ND	
44 Ethyl acetate	43		4.681					ND	
43 Propionitrile	54		4.681					ND	
45 Methacrylonitrile	41		4.824					ND	
46 Chlorobromomethane	49		4.847					ND	
47 Tetrahydrofuran	42	4.895	4.895	0.000	82	40321		6.22	
48 Chloroform	83		4.919					ND	
49 1,1,1-Trichloroethane	97		5.096					ND	
50 Cyclohexane	84		5.156					ND	
51 1,1-Dichloropropene	75		5.239					ND	
52 Carbon tetrachloride	117		5.239					ND	
53 Isobutyl alcohol	41		5.298					ND	
54 Benzene	78		5.417					ND	
55 1,2-Dichloroethane	62		5.428					ND	
56 Tert-amyl methyl ether	73		5.512					ND	
57 n-Heptane	57		5.654					ND	
58 n-Butanol	56		5.891					ND	
59 Trichloroethene	130		5.998					ND	
60 Ethyl acrylate	55		6.069					ND	
61 Methylcyclohexane	83		6.176					ND	
62 1,2-Dichloropropane	63		6.199					ND	
63 Methyl methacrylate	41		6.270					ND	
65 1,4-Dioxane	88		6.306					ND	
64 Dibromomethane	174		6.306					ND	
66 Dichlorobromomethane	83		6.436					ND	
67 2-Nitropropane	41		6.638					ND	
68 2-Chloroethyl vinyl ether	63		6.709					ND	
69 cis-1,3-Dichloropropene	75		6.851					ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982					ND	
71 Toluene	91		7.172					ND	
72 trans-1,3-Dichloropropene	75		7.361					ND	
73 Ethyl methacrylate	69		7.444					ND	
74 1,1,2-Trichloroethane	97		7.539					ND	
75 Tetrachloroethene	166		7.705					ND	
76 1,3-Dichloropropane	76		7.705					ND	
77 2-Hexanone	43		7.776					ND	
78 n-Butyl acetate	43		7.895					ND	
79 Chlorodibromomethane	129		7.931					ND	
80 Tetrahydrothiophene	60		7.931					ND	
81 Ethylene Dibromide	107		8.049					ND	
82 1-Chlorohexane	91		8.500					ND	
83 Chlorobenzene	112		8.535					ND	
84 1,1,1,2-Tetrachloroethane	131		8.607					ND	
85 Ethylbenzene	106		8.642					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106		8.749					ND	
87 o-Xylene	106		9.152					ND	
88 Styrene	104		9.164					ND	
89 Bromoform	173		9.354					ND	
90 Isopropylbenzene	105		9.532					ND	
92 1,4-Dichlorobutane	55		9.626					ND	
91 Cyclohexanone	55		9.626					ND	
93 1,1,2,2-Tetrachloroethane	83		9.816					ND	
95 Bromobenzene	156		9.852					ND	
96 1,2,3-Trichloropropane	110		9.875					ND	
97 trans-1,4-Dichloro-2-butene	53		9.875					ND	
98 N-Propylbenzene	120		9.947					ND	
94 3-Ethyltoluene	105		10.041					ND	
100 2-Chlorotoluene	126		10.041					ND	
101 1,3,5-Trimethylbenzene	105		10.136					ND	
102 4-Chlorotoluene	126		10.160					ND	
99 2-Ethyltoluene	105		10.350					ND	
103 tert-Butylbenzene	119		10.480					ND	
104 Pentachloroethane	167		10.492					ND	
105 1,2,4-Trimethylbenzene	105		10.528					ND	
106 sec-Butylbenzene	105		10.706					ND	
107 1,3-Dichlorobenzene	146		10.824					ND	
108 4-Isopropyltoluene	119		10.860					ND	
109 1,4-Dichlorobenzene	146		10.919					ND	
110 1,2,3-Trimethylbenzene	105		10.966					ND	
111 Benzyl chloride	91		11.049					ND	
112 n-Butylbenzene	91		11.287					ND	
113 1,2-Dichlorobenzene	146		11.310					ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129					ND	
115 1,3,5-Trichlorobenzene	180		12.366					ND	
116 1,2,4-Trichlorobenzene	180		13.018					ND	
117 Hexachlorobutadiene	225		13.208					ND	
118 Naphthalene	128		13.279					ND	
119 1,2,3-Trichlorobenzene	180		13.540					ND	
120 2-Methylnaphthalene	142		14.631					ND	
122 Ethylene oxide	1		-0.010					ND	
123 Propene oxide	1		-0.010					ND	
121 Epichlorohydrin	1		-0.010					ND	
S 125 Trihalomethanes, Total	1		-0.010					ND	
S 124 Total BTEX	1		-0.010					ND	
S 126 1,2-Dichloroethene, Total	96		1.130					ND	
S 127 1,3-Dichloropropene, Total	75		6.750					ND	
S 128 Xylenes, Total	106		16.520					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

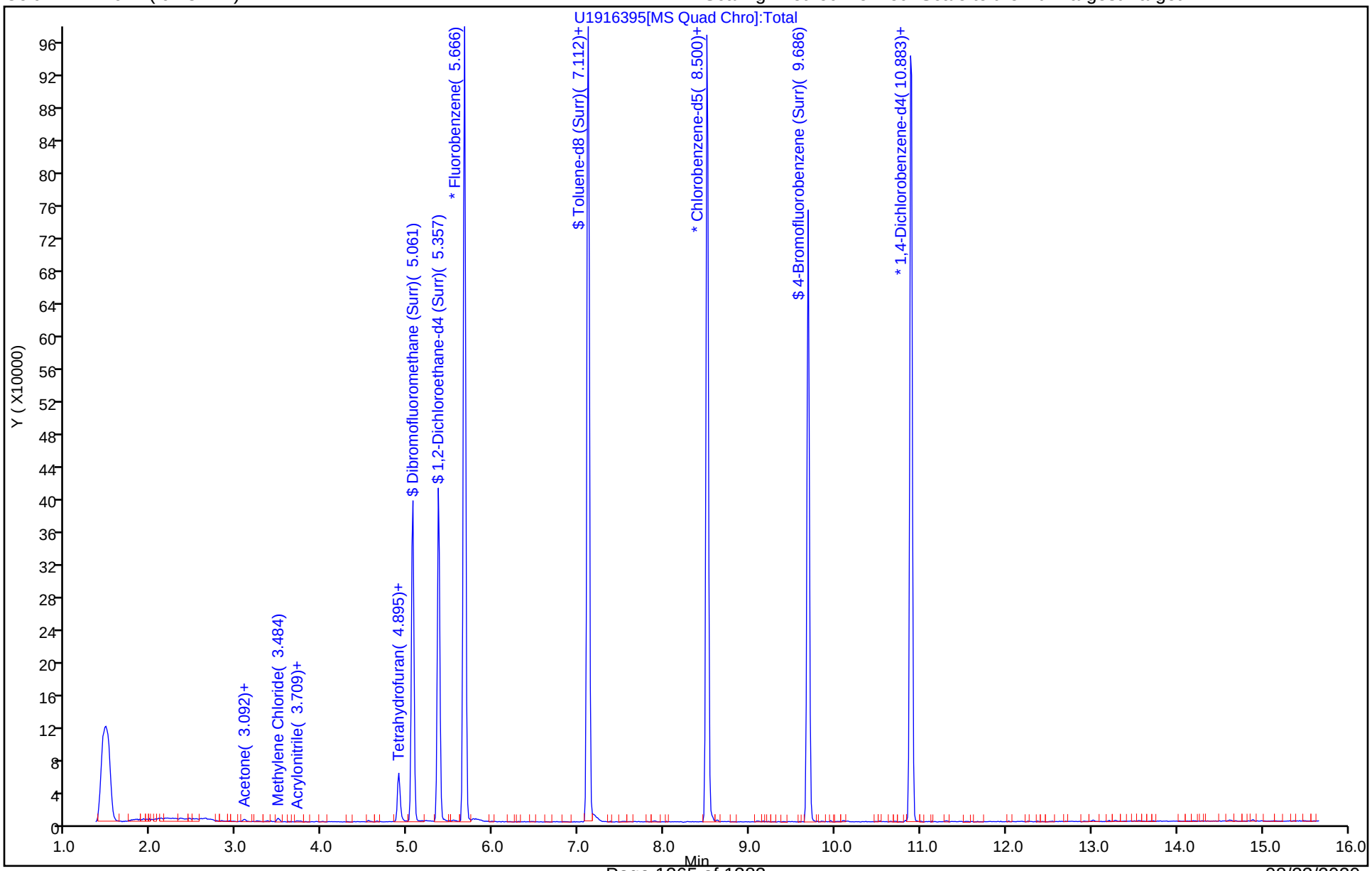
Report Date: 17-Aug-2020 19:48:35 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916395.d

Injection Date:	17-Aug-2020 19:16:11	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916395.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-Aug-2020 19:16:11 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 19:48:34 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

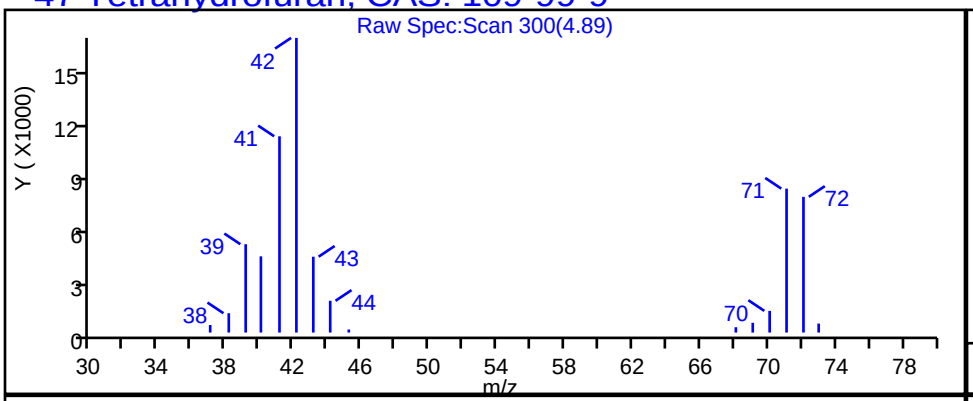
First Level Reviewer: laveyt Date: 17-Aug-2020 19:48:34

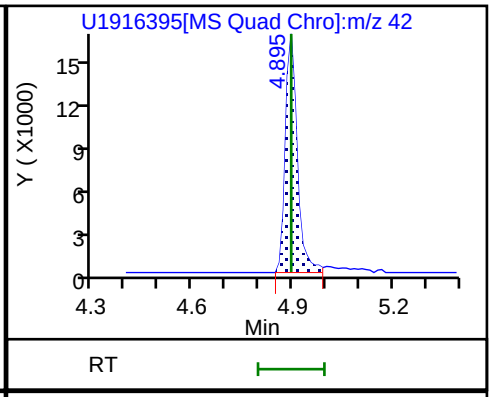
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.9	104.37
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	103.94
$ 6 Toluene-d8 (Surr)	20.0	21.5	107.65
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.2	96.19

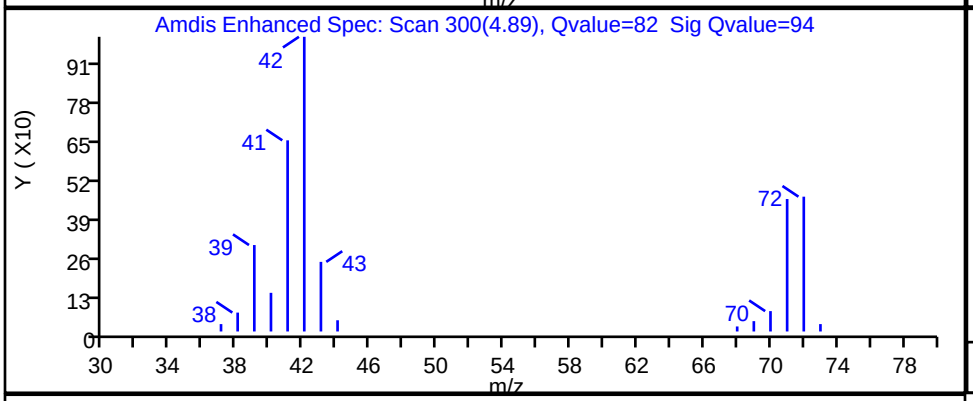
Eurofins TestAmerica, Canton

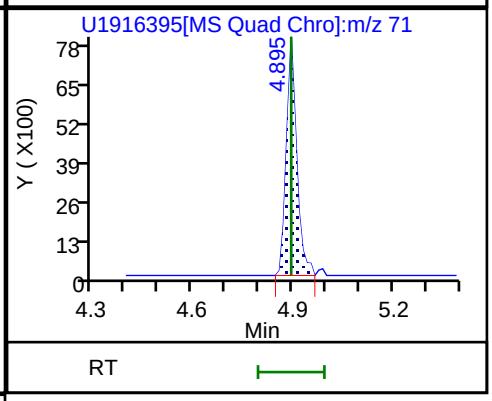
Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916395.d
Injection Date: 17-Aug-2020 19:16:11 Instrument ID: A3UX19
Lims ID: MB
Client ID:
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

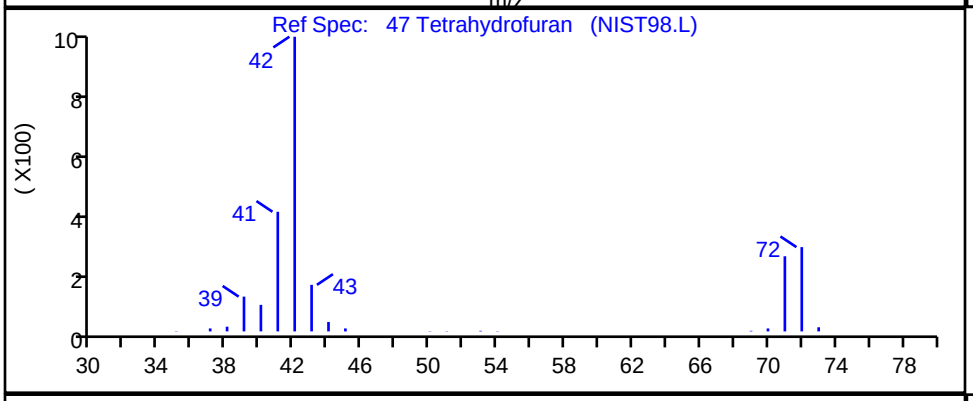
47 Tetrahydrofuran, CAS: 109-99-9

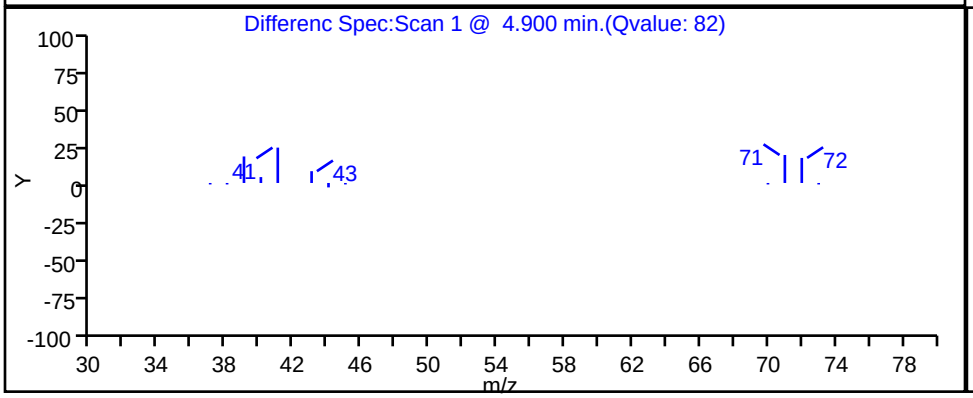


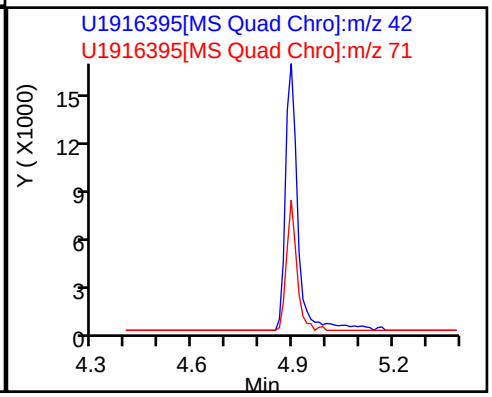












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 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		75-130
460-00-4	4-Bromofluorobenzene (Surr)	97		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	105		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447698/8

Matrix: Water Lab File ID: U1916425.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 20:57

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

Number TICs Found: 1 TIC Result Total: 11.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
109-99-9	Tetrahydrofuran	4.90	11.9		83%

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916425.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Aug-2020 20:57:20 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:14:14 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 21:32:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	912538	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	657246	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	332725	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	257601	20.0	21.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	95	293099	20.0	20.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	843485	20.0	21.4	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	288246	20.0	19.4	
9 Dichlorodifluoromethane	85		1.610					ND	
10 Chloromethane	50		1.823					ND	
12 Vinyl chloride	62		1.918					ND	
11 Butadiene	54		1.918					ND	
14 1-Chloro-1-fluoroethane TIC	47		2.215					ND	
13 Bromomethane	94		2.250					ND	
15 Chloroethane	64		2.310					ND	
16 Dichlorofluoromethane	67		2.523					ND	
17 Trichlorofluoromethane	101		2.535					ND	
18 Ethyl ether	59		2.820					ND	
19 Acrolein	56		2.938					ND	
20 1,1-Dichloroethene	61		3.033					ND	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.069					ND	
22 Acetone	43	3.092	3.080	0.012	99	6492		1.81	
23 Methylal	45		3.092					ND	
24 Iodomethane	142		3.175					ND	
25 Carbon disulfide	76		3.246					ND	
26 Acetonitrile	41	3.353	3.341	0.012	57	1465		3.81	
27 3-Chloro-1-propene	41		3.365					ND	
28 Methyl acetate	43		3.389					ND	
29 Methylene Chloride	49	3.495	3.484	0.011	80	2798		0.2154	
30 2-Methyl-2-propanol	59	3.602	3.578	0.024	6	226		0.1829	
31 Acrylonitrile	53	3.709	3.697	0.012	65	938		0.2044	
32 trans-1,2-Dichloroethene	61		3.733					ND	
33 Methyl tert-butyl ether	73		3.744					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	57		3.994					ND	
35 1,1-Dichloroethane	63		4.112					ND	
36 Vinyl acetate	43		4.148					ND	
37 Isopropyl ether	87		4.183					ND	
38 2-Chloro-1,3-butadiene	53		4.207					ND	
39 Tert-butyl ethyl ether	59		4.503					ND	
41 cis-1,2-Dichloroethene	96		4.634					ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	96	677		0.3142	
42 2,2-Dichloropropane	77		4.634					ND	
44 Ethyl acetate	43		4.693					ND	
43 Propionitrile	54		4.693					ND	
45 Methacrylonitrile	41		4.824					ND	
46 Chlorobromomethane	49		4.847					ND	
47 Tetrahydrofuran	42	4.895	4.895	0.000	83	64182		11.9	
48 Chloroform	83		4.907					ND	
49 1,1,1-Trichloroethane	97		5.085					ND	
50 Cyclohexane	84		5.144					ND	
51 1,1-Dichloropropene	75		5.239					ND	
52 Carbon tetrachloride	117		5.239					ND	
53 Isobutyl alcohol	41		5.298					ND	
54 Benzene	78		5.417					ND	
55 1,2-Dichloroethane	62		5.428					ND	
56 Tert-amyl methyl ether	73		5.511					ND	
57 n-Heptane	57		5.654					ND	
58 n-Butanol	56		5.891					ND	
59 Trichloroethene	130		5.998					ND	
60 Ethyl acrylate	55		6.069					ND	
61 Methylcyclohexane	83		6.176					ND	
62 1,2-Dichloropropane	63		6.199					ND	
63 Methyl methacrylate	41		6.282					ND	
65 1,4-Dioxane	88		6.306					ND	
64 Dibromomethane	174		6.306					ND	
66 Dichlorobromomethane	83		6.436					ND	
67 2-Nitropropane	41		6.638					ND	
68 2-Chloroethyl vinyl ether	63		6.697					ND	
69 cis-1,3-Dichloropropene	75		6.851					ND	
70 4-Methyl-2-pentanone (MIBK)	43		6.982					ND	
71 Toluene	91		7.172					ND	
72 trans-1,3-Dichloropropene	75		7.361					ND	
73 Ethyl methacrylate	69		7.444					ND	
74 1,1,2-Trichloroethane	97		7.539					ND	
75 Tetrachloroethene	166		7.705					ND	
76 1,3-Dichloropropane	76		7.705					ND	
77 2-Hexanone	43		7.776					ND	
78 n-Butyl acetate	43		7.895					ND	
79 Chlorodibromomethane	129		7.931					ND	
80 Tetrahydrothiophene	60		7.931					ND	
81 Ethylene Dibromide	107		8.049					ND	
82 1-Chlorohexane	91		8.500					ND	
83 Chlorobenzene	112		8.535					ND	
84 1,1,1,2-Tetrachloroethane	131		8.607					ND	
85 Ethylbenzene	106		8.642					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106		8.749					ND	
87 o-Xylene	106		9.152					ND	
88 Styrene	104		9.164					ND	
89 Bromoform	173		9.354					ND	
90 Isopropylbenzene	105		9.532					ND	
91 Cyclohexanone	55		9.626					ND	
92 1,4-Dichlorobutane	55		9.626					ND	
93 1,1,2,2-Tetrachloroethane	83		9.816					ND	
95 Bromobenzene	156		9.852					ND	
96 1,2,3-Trichloropropane	110		9.875					ND	
97 trans-1,4-Dichloro-2-butene	53		9.875					ND	
98 N-Propylbenzene	120		9.947					ND	
94 3-Ethyltoluene	105		10.041					ND	
100 2-Chlorotoluene	126		10.041					ND	
101 1,3,5-Trimethylbenzene	105		10.136					ND	
102 4-Chlorotoluene	126		10.160					ND	
99 2-Ethyltoluene	105		10.350					ND	
103 tert-Butylbenzene	119		10.480					ND	
104 Pentachloroethane	167		10.492					ND	
105 1,2,4-Trimethylbenzene	105		10.528					ND	
106 sec-Butylbenzene	105		10.706					ND	
107 1,3-Dichlorobenzene	146		10.824					ND	
108 4-Isopropyltoluene	119		10.860					ND	
109 1,4-Dichlorobenzene	146		10.919					ND	
110 1,2,3-Trimethylbenzene	105		10.966					ND	
111 Benzyl chloride	91		11.049					ND	
112 n-Butylbenzene	91		11.287					ND	
113 1,2-Dichlorobenzene	146		11.310					ND	
114 1,2-Dibromo-3-Chloropropane	157		12.129					ND	
115 1,3,5-Trichlorobenzene	180		12.366					ND	
116 1,2,4-Trichlorobenzene	180		13.018					ND	
117 Hexachlorobutadiene	225		13.208					ND	
118 Naphthalene	128		13.279					ND	
119 1,2,3-Trichlorobenzene	180		13.552					ND	
120 2-Methylnaphthalene	142		14.631					ND	
122 Ethylene oxide	1		-0.010					ND	
123 Propene oxide	1		-0.010					ND	
121 Epichlorohydrin	1		-0.010					ND	
S 125 Trihalomethanes, Total	1		-0.010					ND	
S 124 Total BTEX	1		-0.010					ND	
S 126 1,2-Dichloroethene, Total	96		1.130					ND	
S 127 1,3-Dichloropropene, Total	75		6.750					ND	
S 128 Xylenes, Total	106		16.520					ND	

Reagents:

vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

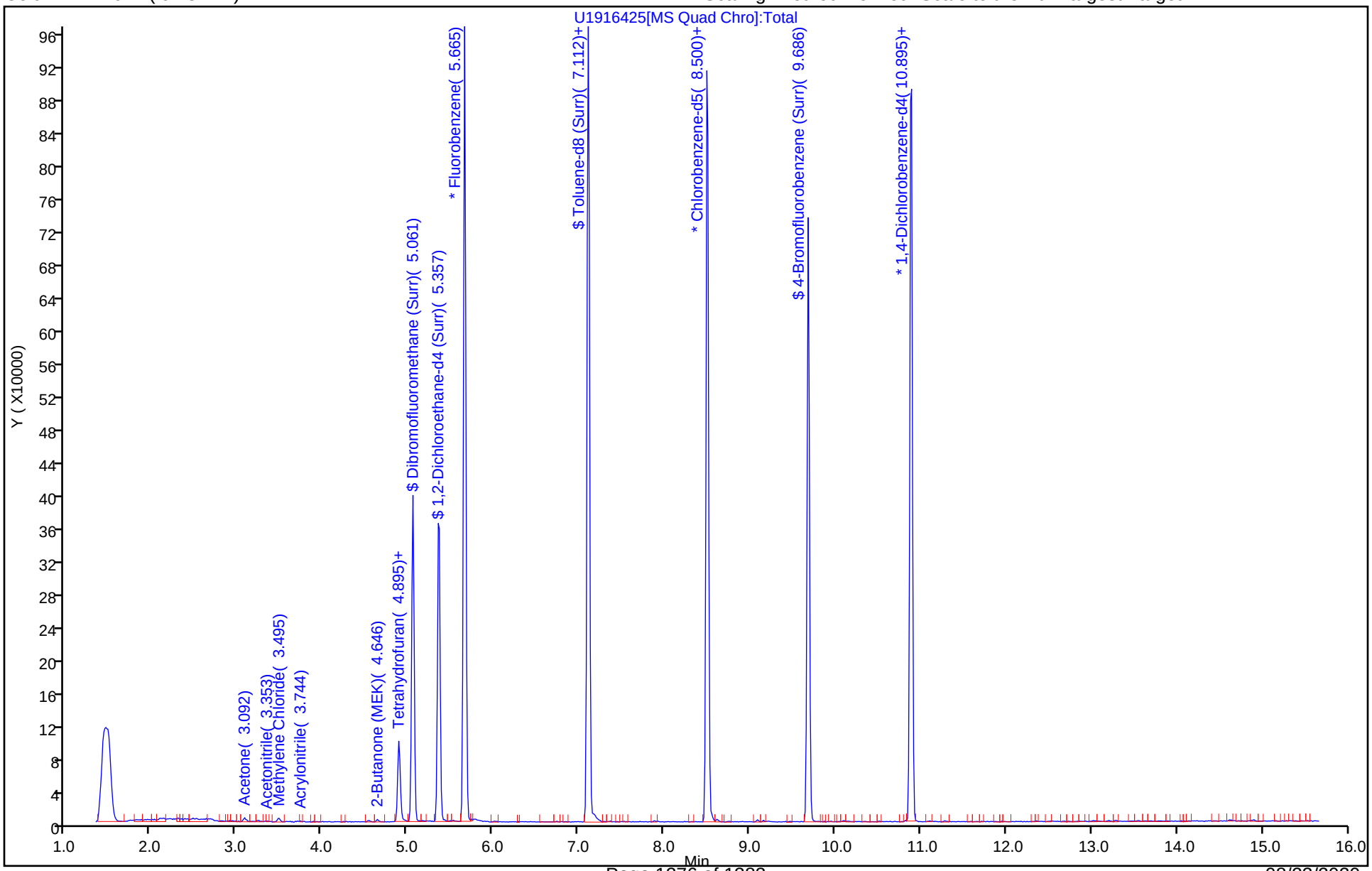
Report Date: 18-Aug-2020 21:32:10 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916425.d

Injection Date:	18-Aug-2020 20:57:20	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916425.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Aug-2020 20:57:20 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 19:14:14 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

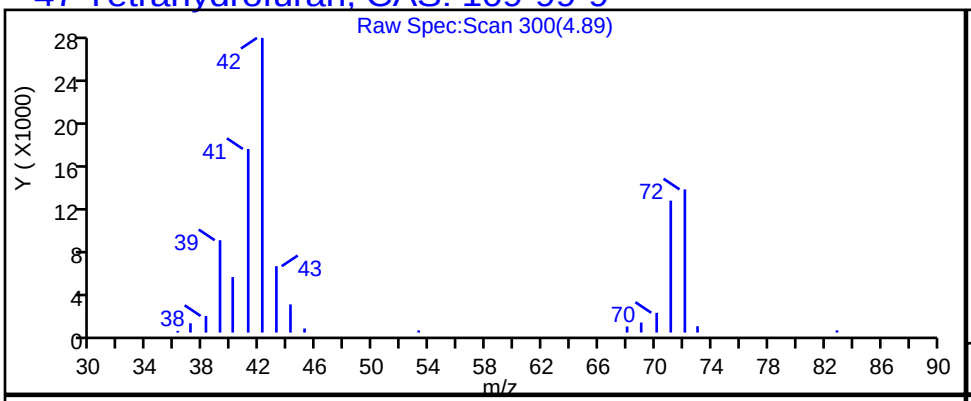
First Level Reviewer: laveyt Date: 18-Aug-2020 21:32:09

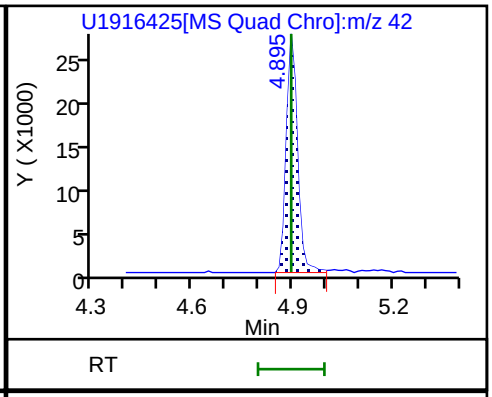
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.0	104.86
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.8	103.88
$ 6 Toluene-d8 (Surr)	20.0	21.4	107.01
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.4	97.18

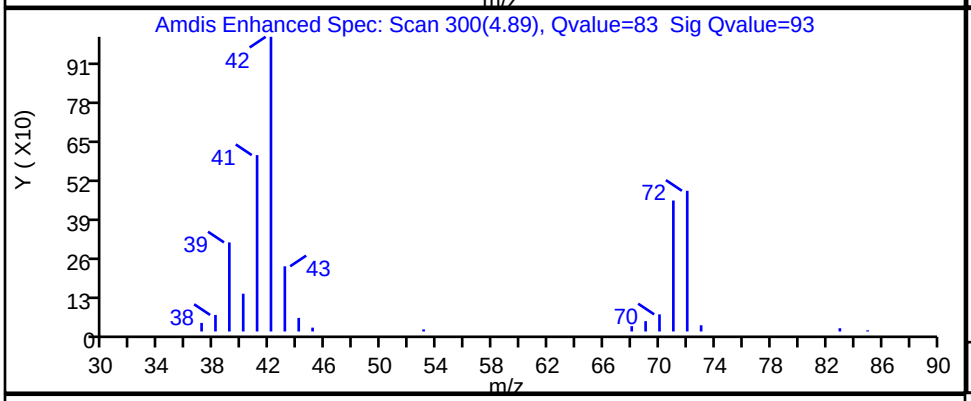
Eurofins TestAmerica, Canton

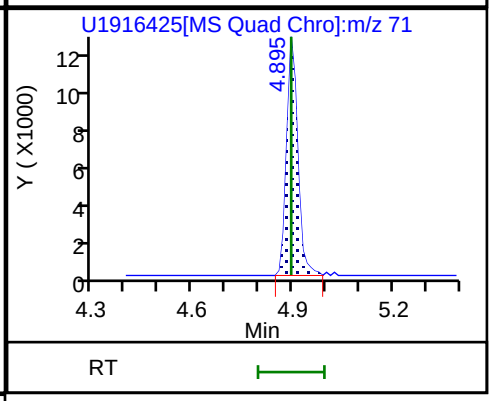
Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916425.d
Injection Date: 18-Aug-2020 20:57:20 Instrument ID: A3UX19
Lims ID: MB
Client ID:
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

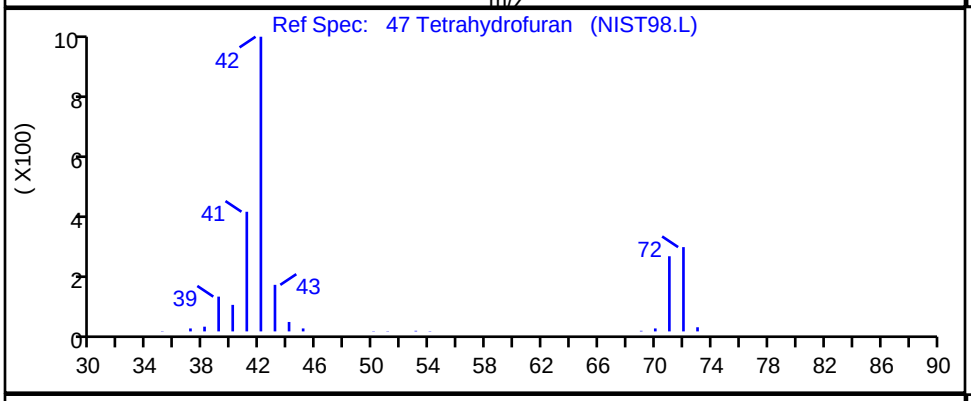
47 Tetrahydrofuran, CAS: 109-99-9

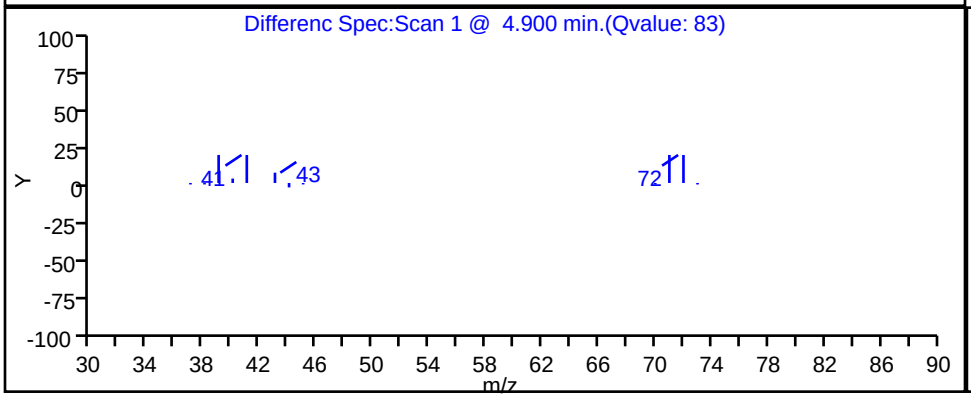


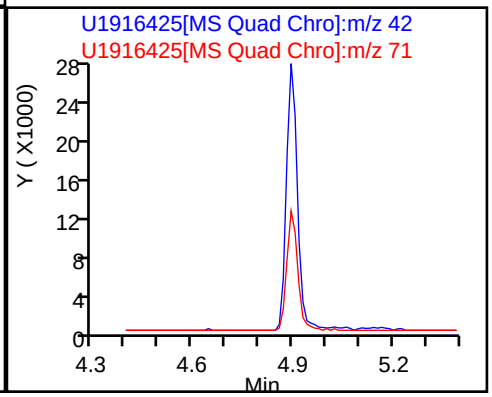












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.41
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	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1.0	U	1.0	0.41
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.41
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.46
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.37
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	0.51
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.36
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.45
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	0.43
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.43
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.37
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.40
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.37
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	10	U	10	1.1
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.42
591-78-6	2-Hexanone	5.0	U	5.0	2.1
108-86-1	Bromobenzene	1.0	U	1.0	0.38
74-97-5	Bromochloromethane	1.0	U	1.0	0.52
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.44
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.49
67-64-1	Acetone	5.0	U	5.0	5.4
71-43-2	Benzene	1.0	U	1.0	0.38
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	0.32
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.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.40
74-87-3	Chloromethane	1.0	U	1.0	0.64
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.38
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	0.33
75-27-4	Bromodichloromethane	1.0	U	1.0	0.35
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.35
100-41-4	Ethylbenzene	1.0	U	1.0	0.39
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.37
108-20-3	Diisopropyl ether	5.0	U	5.0	0.36
91-20-3	Naphthalene	1.0	U	1.0	0.82
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.40
104-51-8	n-Butylbenzene	1.0	U	1.0	0.59
98-82-8	Isopropylbenzene	1.0	U	1.0	0.45
103-65-1	n-Propylbenzene	1.0	U	1.0	0.46
78-93-3	2-Butanone	5.0	U	5.0	2.4
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	2.1
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.63
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.44
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.39
75-09-2	Methylene Chloride	5.0	U	5.0	1.3
95-47-6	o-Xylene	1.0	U	1.0	0.43
100-42-5	Styrene	1.0	U	1.0	0.40
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.43
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.51
127-18-4	Tetrachloroethene	1.0	U	1.0	0.33
108-88-3	Toluene	1.0	U	1.0	0.35
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.67
79-01-6	Trichloroethene	1.0	U	1.0	0.36
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.45
108-05-4	Vinyl acetate	2.0	U	2.0	0.78
75-01-4	Vinyl chloride	0.50	U	0.50	0.50
75-65-0	tert-Butyl alcohol	20	U	20	1.7
1330-20-7	Xylenes, Total	2.0	U	2.0	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 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)	87		75-130
460-00-4	4-Bromofluorobenzene (Surr)	101		47-134
2037-26-5	Toluene-d8 (Surr)	96		69-122
1868-53-7	Dibromofluoromethane (Surr)	83		78-129

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

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: MB 240-447867/8

Matrix: Water Lab File ID: U1279812.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 17:38

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.: 447867 Units: ug/L

Number TICs Found: 1 TIC Result Total: 31.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		
109-99-9	Tetrahydrofuran	4.37	31.5		89%

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279812.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Aug-2020 17:38:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-008
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 18:37:16 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1007

First Level Reviewer: laveyt Date: 19-Aug-2020 18:37:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	1000312	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	688248	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.000	95	355736	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	219575	20.0	16.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.811	0.012	94	283013	20.0	17.4	
$ 6 Toluene-d8 (Surr)	98	6.456	6.444	0.012	93	894251	20.0	19.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	94	322420	20.0	20.2	
9 Dichlorodifluoromethane	85		1.392					ND	
10 Chloromethane	50		1.581					ND	
11 Butadiene	54		1.640					ND	
12 Vinyl chloride	62		1.676					ND	
13 1-Chloro-1-fluoroethane TIC	47		1.900					ND	
14 Bromomethane	94		1.924					ND	
15 Chloroethane	64		1.983					ND	
16 Dichlorofluoromethane	67		2.161					ND	
17 Trichlorofluoromethane	101		2.173					ND	
18 Methylal	45		2.346					ND	
19 Ethyl ether	59		2.433					ND	
20 Acrolein	56		2.551					ND	
21 1,1-Dichloroethene	61		2.622					ND	
22 112TCTFE	101		2.658					ND	
23 Acetone	43	2.693	2.681	0.012	98	6981		1.10	
24 Iodomethane	142		2.764					ND	
25 Carbon disulfide	76		2.812					ND	
26 Acetonitrile	41		2.930					ND	
27 3-Chloro-1-propene	41		2.942					ND	
28 Methyl acetate	43		2.965					ND	
29 Methylene Chloride	49	3.060	3.048	0.012	95	7068		0.3846	
30 2-Methyl-2-propanol	59		3.166					ND	
31 Acrylonitrile	53		3.273					ND	
32 trans-1,2-Dichloroethene	61		3.285					ND	
33 Methyl tert-butyl ether	73		3.285					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Hexane	57		3.510					ND	
35 1,1-Dichloroethane	63		3.640					ND	
36 Vinyl acetate	43		3.687					ND	
37 Isopropyl ether	87		3.699					ND	
38 2-Chloro-1,3-butadiene	53		3.723					ND	
39 Tert-butyl ethyl ether	59		4.007					ND	
40 2,2-Dichloropropane	77		4.125					ND	
41 cis-1,2-Dichloroethene	96		4.137					ND	
42 2-Butanone (MEK)	72	4.161	4.149	0.012	98	2273		0.7200	
43 Ethyl acetate	43		4.196					ND	U
44 Propionitrile	54		4.208					ND	
46 Chlorobromomethane	49		4.326					ND	
45 Methacrylonitrile	41		4.326					ND	
47 Tetrahydrofuran	42	4.374	4.373	0.001	89	254238		31.5	
48 Chloroform	83		4.397					ND	
49 1,1,1-Trichloroethane	97		4.551					ND	
50 Cyclohexane	84		4.598					ND	
51 1,1-Dichloropropene	75		4.681					ND	
52 Carbon tetrachloride	117		4.693					ND	
53 Isobutyl alcohol	41		4.788					ND	
54 Benzene	78		4.859					ND	
55 1,2-Dichloroethane	62		4.882					ND	
56 Tert-amyl methyl ether	73		4.953					ND	
57 n-Heptane	57		5.072					ND	
58 n-Butanol	56		5.344					ND	
59 Trichloroethene	130		5.403					ND	
60 Ethyl acrylate	55		5.486					ND	
61 Methylcyclohexane	83		5.569					ND	
62 1,2-Dichloropropane	63		5.592					ND	
63 Methyl methacrylate	41		5.687					ND	
64 Dibromomethane	174		5.699					ND	
65 1,4-Dioxane	88		5.711					ND	
66 Dichlorobromomethane	83		5.829					ND	
67 2-Nitropropane	41		6.030					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		6.350					ND	U
71 Toluene	91		6.503					ND	
72 trans-1,3-Dichloropropene	75		6.705					ND	
73 Tetrahydrothiophene	60		6.745					ND	
74 Ethyl methacrylate	69		6.776					ND	
75 1,1,2-Trichloroethane	97		6.870					ND	
76 Tetrachloroethene	166		7.000					ND	
77 1,3-Dichloropropane	76		7.024					ND	
78 2-Hexanone	43		7.083					ND	
79 n-Butyl acetate	43		7.202					ND	
80 Chlorodibromomethane	129		7.225					ND	
81 Ethylene Dibromide	107		7.332					ND	
82 1-Chlorohexane	91		7.746					ND	
83 Chlorobenzene	112		7.781					ND	
84 1,1,1,2-Tetrachloroethane	131		7.852					ND	
85 Ethylbenzene	106		7.876					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 m-Xylene & p-Xylene	106		7.982					ND	
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	
91 Cyclohexanone	55		8.799					ND	
92 Bromobenzene	156		9.000					ND	
93 1,1,2,2-Tetrachloroethane	83		9.000					ND	
94 1,2,3-Trichloropropane	110		9.036					ND	
95 trans-1,4-Dichloro-2-butene	53		9.047					ND	
96 N-Propylbenzene	120		9.095					ND	
97 2-Chlorotoluene	126		9.189					ND	
98 1,3,5-Trimethylbenzene	105		9.272					ND	
99 4-Chlorotoluene	126		9.284					ND	
100 3-Ethyltoluene	105		9.324					ND	
101 2-Ethyltoluene	105		9.513					ND	
102 tert-Butylbenzene	119		9.580					ND	
103 Pentachloroethane	167		9.604					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		9.935					ND	
108 1,4-Dichlorobenzene	146		9.994					ND	
109 1,2,3-Trimethylbenzene	105		10.041					ND	
110 Benzyl chloride	91		10.136					ND	
111 n-Butylbenzene	91		10.337					ND	
112 1,2-Dichlorobenzene	146		10.361					ND	
113 1,2-Dibromo-3-Chloropropane	157		11.130					ND	
114 1,3,5-Trichlorobenzene	180		11.331					ND	
115 1,2,4-Trichlorobenzene	180		11.947					ND	
116 Hexachlorobutadiene	225		12.124					ND	
117 Naphthalene	128		12.195					ND	
118 1,2,3-Trichlorobenzene	180		12.432					ND	
119 2-Methylnaphthalene	142		13.366					ND	
168 1-Methylnaphthalene	142	13.591	13.591	0.000	0	2547			NC
169 Isooctane	57		0.000					ND	
120 1,4-Dichlorobutane	1		-0.510					ND	
123 Epichlorohydrin	1		-0.510					ND	
121 Ethylene oxide	1		-0.510					ND	
122 Propene oxide	1		-0.510					ND	
S 124 Trihalomethanes, Total	1		-0.510					ND	
S 125 Total BTEX	1		-0.510					ND	
S 126 1,2-Dichloroethene, Total	96		0.630					ND	
S 127 1,3-Dichloropropene, Total	75		6.250					ND	
S 128 Xylenes, Total	106		16.020					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags
U - Marked Undetected

Reagents:

vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

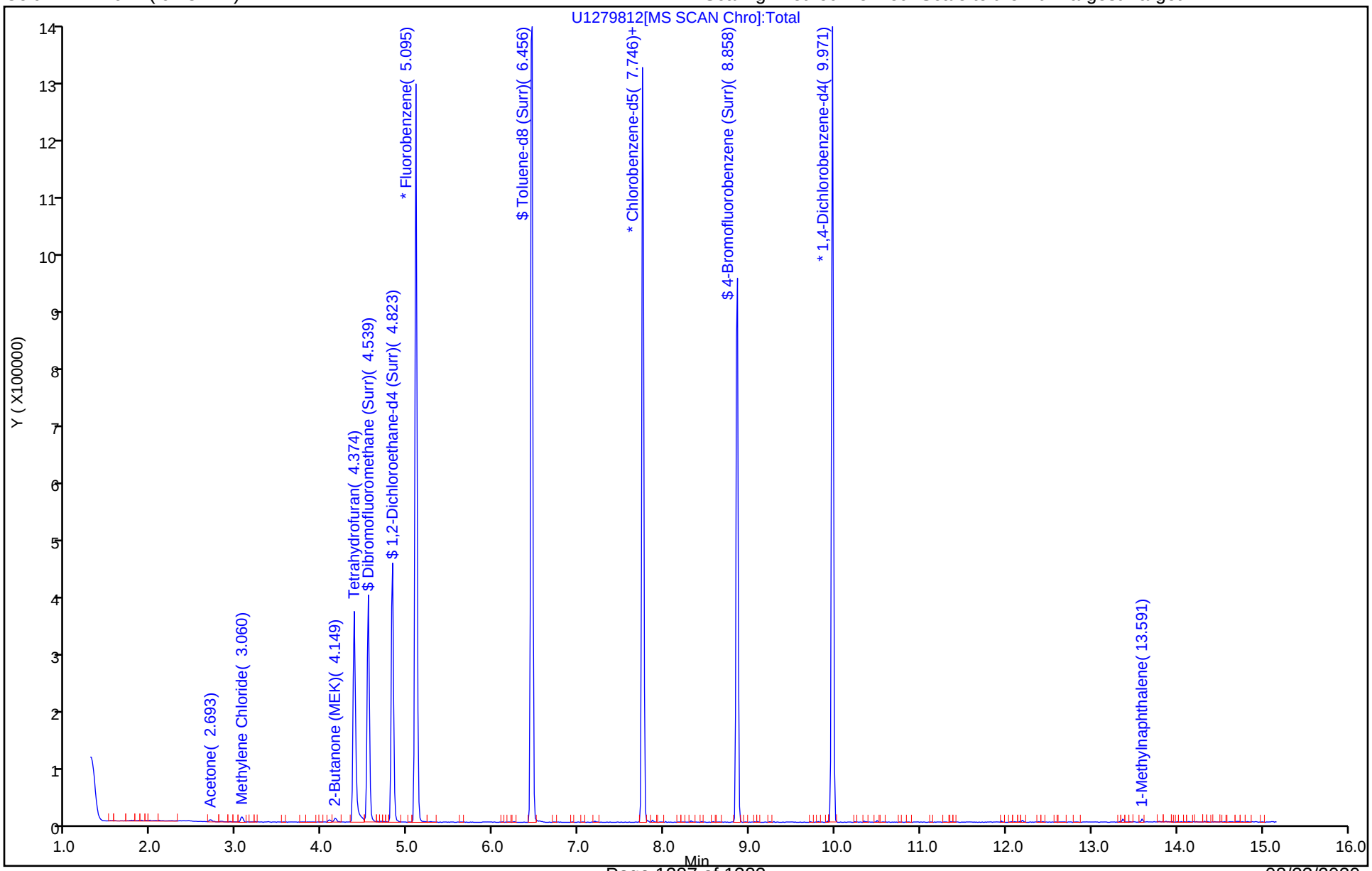
Report Date: 19-Aug-2020 18:37:16 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279812.D

Injection Date:	19-Aug-2020 17:38:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279812.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Aug-2020 17:38:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-008
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 18:37:16 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1007

First Level Reviewer: laveyt Date: 19-Aug-2020 18:37:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	16.5	82.69
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.4	87.08
$ 6 Toluene-d8 (Surr)	20.0	19.2	96.05
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.2	101.15

Report Date: 19-Aug-2020 18:37:16 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279812.D

Injection Date: 19-Aug-2020 17:38:30 Instrument ID: A3UX12

Lims ID: MB

Client ID:

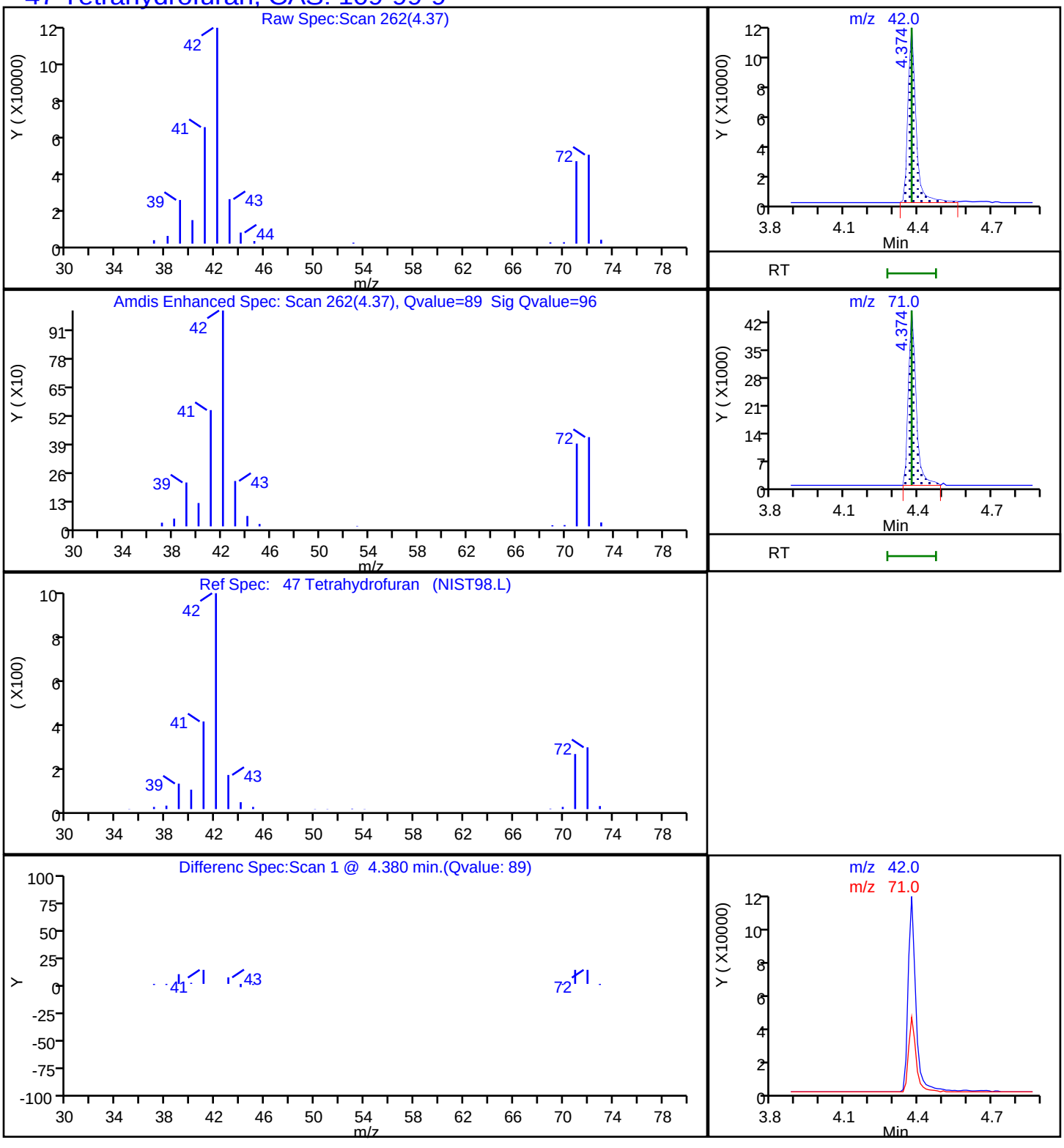
Operator ID: 001904 ALS Bottle#: 7 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: 8260_12_h2o Limit Group: MSV 8260C ICAL

Column: DB-624 (0.18 mm) Detector MS SCAN

47 Tetrahydrofuran, CAS: 109-99-9



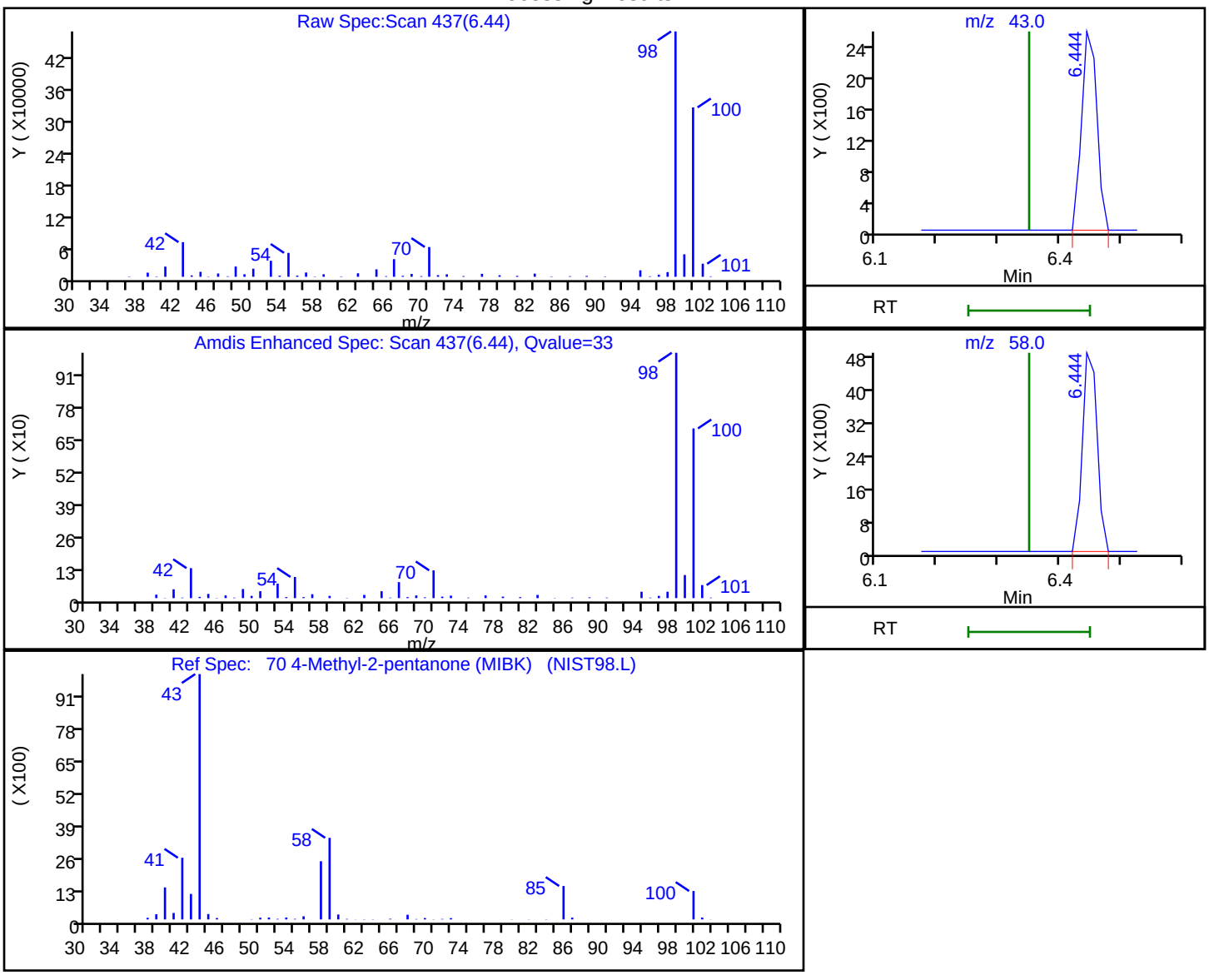
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279812.D
Injection Date: 19-Aug-2020 17:38:30 Instrument ID: A3UX12
Lims ID: MB
Client ID:
Operator ID: 001904 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

70 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
6.44	43.00	4453	0.205094
6.44	58.00	8069	

Reviewer: laveyt, 19-Aug-2020 18:37:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447281/5

Matrix: Water Lab File ID: U1916362.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 18:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	20.0		1.0	0.41
71-55-6	1,1,1-Trichloroethane	18.5		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	23.6		1.0	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	20.4		1.0	0.41
75-34-3	1,1-Dichloroethane	21.1		1.0	0.41
75-35-4	1,1-Dichloroethene	19.4		1.0	0.46
563-58-6	1,1-Dichloropropene	20.4		1.0	0.37
87-61-6	1,2,3-Trichlorobenzene	18.5		1.0	0.54
96-18-4	1,2,3-Trichloropropane	21.3		1.0	0.51
120-82-1	1,2,4-Trichlorobenzene	16.7		1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	21.2		1.0	0.45
96-12-8	1,2-Dibromo-3-Chloropropane	19.8		5.0	0.91
95-50-1	1,2-Dichlorobenzene	20.9		1.0	0.43
107-06-2	1,2-Dichloroethane	18.0		1.0	0.43
78-87-5	1,2-Dichloropropane	21.6		1.0	0.37
541-73-1	1,3-Dichlorobenzene	19.3		1.0	0.40
142-28-9	1,3-Dichloropropane	21.8		1.0	0.21
106-46-7	1,4-Dichlorobenzene	19.1		1.0	0.37
594-20-7	2,2-Dichloropropane	22.4		1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	39.3		10	1.1
95-49-8	2-Chlorotoluene	21.3		1.0	0.42
591-78-6	2-Hexanone	42.9		5.0	2.1
108-86-1	Bromobenzene	19.3		1.0	0.38
74-97-5	Bromochloromethane	19.8		1.0	0.52
106-43-4	4-Chlorotoluene	20.5		1.0	0.44
99-87-6	p-Isopropyltoluene	20.2		1.0	0.49
67-64-1	Acetone	48.4		5.0	5.4
71-43-2	Benzene	21.4		1.0	0.38
75-25-2	Bromoform	17.3		1.0	0.76
74-83-9	Bromomethane	18.5		1.0	0.42
75-15-0	Carbon disulfide	19.5		1.0	0.28
56-23-5	Carbon tetrachloride	17.7		1.0	0.26
108-90-7	Chlorobenzene	20.3		1.0	0.32
75-00-3	Chloroethane	21.7		1.0	0.83
67-66-3	Chloroform	19.8		1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447281/5

Matrix: Water Lab File ID: U1916362.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 18:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20.8		1.0	0.64
156-59-2	cis-1,2-Dichloroethene	19.2		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	19.3		1.0	0.61
87-68-3	Hexachlorobutadiene	14.1		1.0	0.83
74-95-3	Dibromomethane	16.2		1.0	0.33
75-27-4	Bromodichloromethane	18.6		1.0	0.35
75-71-8	Dichlorodifluoromethane	17.2		1.0	0.35
100-41-4	Ethylbenzene	20.5		1.0	0.39
106-93-4	1,2-Dibromoethane	19.6		1.0	0.37
91-20-3	Naphthalene	20.8		1.0	0.82
179601-23-1	m-Xylene & p-Xylene	20.8		2.0	0.40
104-51-8	n-Butylbenzene	20.1		1.0	0.59
98-82-8	Isopropylbenzene	20.7		1.0	0.45
103-65-1	n-Propylbenzene	21.0		1.0	0.46
78-93-3	2-Butanone	40.1		5.0	2.4
108-10-1	4-Methyl-2-pentanone	41.4		5.0	2.1
135-98-8	sec-Butylbenzene	20.6		1.0	0.63
1634-04-4	Methyl tert-butyl ether	19.4		1.0	0.44
75-09-2	Methylene Chloride	20.6		5.0	1.3
95-47-6	o-Xylene	21.1		1.0	0.43
100-42-5	Styrene	20.7		1.0	0.40
98-06-6	tert-Butylbenzene	19.6		1.0	0.51
127-18-4	Tetrachloroethene	18.1		1.0	0.33
108-88-3	Toluene	21.5		1.0	0.35
156-60-5	trans-1,2-Dichloroethene	20.4		1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	19.6		1.0	0.67
79-01-6	Trichloroethene	18.2		1.0	0.36
75-69-4	Trichlorofluoromethane	16.9		1.0	0.45
108-05-4	Vinyl acetate	21.5		2.0	0.78
75-01-4	Vinyl chloride	21.4		0.50	0.50
75-65-0	tert-Butyl alcohol	225		20	1.7
1330-20-7	Xylenes, Total	41.9		2.0	0.42
124-48-1	Dibromochloromethane	19.3		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447281/5

Matrix: Water Lab File ID: U1916362.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2020 18:29

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447281 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-130
460-00-4	4-Bromofluorobenzene (Surr)	102		47-134
2037-26-5	Toluene-d8 (Surr)	108		69-122
1868-53-7	Dibromofluoromethane (Surr)	96		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916362.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Aug-2020 18:29:02 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 16:45:50 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 19:04:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	1014792	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	84	743246	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	391665	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	94	261781	20.0	19.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	99	291090	20.0	18.6	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	958275	20.0	21.5	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	340854	20.0	20.3	
9 Dichlorodifluoromethane	85	1.610	1.598	0.012	99	336649	20.0	17.2	
10 Chloromethane	50	1.823	1.812	0.011	98	305002	20.0	20.8	
12 Vinyl chloride	62	1.918	1.907	0.011	97	323850	20.0	21.4	
11 Butadiene	54	1.930	1.918	0.012	88	309644	20.0	21.1	
13 Bromomethane	94	2.250	2.250	0.000	91	219107	20.0	18.5	
15 Chloroethane	64	2.310	2.310	0.000	100	203121	20.0	21.7	
16 Dichlorofluoromethane	67	2.523	2.523	0.000	97	459174	20.0	19.8	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	98	426208	20.0	16.9	
18 Ethyl ether	59	2.820	2.808	0.012	89	201654	20.0	22.1	
19 Acrolein	56	2.938	2.926	0.012	99	76192	100.0	33.8	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	353437	20.0	19.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.069	3.069	0.000	93	265638	20.0	20.4	
22 Acetone	43	3.081	3.081	-0.001	100	192503	40.0	48.4	
24 Iodomethane	142	3.187	3.175	0.012	99	411911	20.0	17.4	
25 Carbon disulfide	76	3.247	3.247	0.000	99	743521	20.0	19.5	
27 3-Chloro-1-propene	41	3.377	3.365	0.012	90	339656	20.0	18.9	
28 Methyl acetate	43	3.389	3.389	0.000	97	481256	40.0	40.7	
29 Methylene Chloride	49	3.484	3.472	0.012	88	296910	20.0	20.6	
30 2-Methyl-2-propanol	59	3.579	3.579	0.000	97	308712	200.0	224.7	
31 Acrylonitrile	53	3.697	3.697	0.000	99	1217001	200.0	238.5	
32 trans-1,2-Dichloroethene	61	3.733	3.733	0.000	74	349869	20.0	20.4	
33 Methyl tert-butyl ether	73	3.745	3.733	0.012	94	681531	20.0	19.4	
34 Hexane	57	3.994	3.982	0.012	90	364248	20.0	20.4	
35 1,1-Dichloroethane	63	4.112	4.112	0.000	97	433340	20.0	21.1	
36 Vinyl acetate	43	4.160	4.148	0.012	97	505365	20.0	21.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	81	281526	20.0	19.2	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	91	96026	40.0	40.1	
42 2,2-Dichloropropane	77	4.646	4.634	0.012	90	277684	20.0	22.4	
46 Chlorobromomethane	49	4.847	4.847	0.000	88	195316	20.0	19.8	
47 Tetrahydrofuran	42	4.895	4.883	0.012	85	227027	40.0	43.3	
48 Chloroform	83	4.919	4.907	0.012	93	446011	20.0	19.8	
49 1,1,1-Trichloroethane	97	5.096	5.085	0.011	98	392547	20.0	18.5	
50 Cyclohexane	84	5.156	5.144	0.012	95	395694	20.0	20.4	
51 1,1-Dichloropropene	75	5.239	5.227	0.012	98	363752	20.0	20.4	
52 Carbon tetrachloride	117	5.239	5.239	0.000	97	360591	20.0	17.7	
53 Isobutyl alcohol	41	5.298	5.298	0.000	93	338794	500.0	608.0	
54 Benzene	78	5.417	5.417	0.000	95	1032907	20.0	21.4	
55 1,2-Dichloroethane	62	5.429	5.429	-0.001	98	328531	20.0	18.0	
57 n-Heptane	57	5.654	5.642	0.012	81	183355	20.0	16.0	
59 Trichloroethene	130	5.998	5.998	0.000	97	292602	20.0	18.2	
61 Methylcyclohexane	83	6.176	6.176	0.000	91	438278	20.0	18.8	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	96	242126	20.0	21.6	
65 1,4-Dioxane	88	6.306	6.306	0.000	89	77849	400.0	642.1	
64 Dibromomethane	174	6.306	6.306	0.000	94	186308	20.0	16.2	
66 Dichlorobromomethane	83	6.436	6.437	-0.001	100	328211	20.0	18.6	
68 2-Chloroethyl vinyl ether	63	6.709	6.697	0.012	93	352847	20.0	39.3	
69 cis-1,3-Dichloropropene	75	6.852	6.852	0.000	96	379012	20.0	19.3	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	96	672237	40.0	41.4	
71 Toluene	91	7.172	7.172	0.000	98	1082182	20.0	21.5	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	350191	20.0	19.6	
73 Ethyl methacrylate	69	7.444	7.445	0.000	88	340508	20.0	21.1	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	225145	20.0	21.3	
75 Tetrachloroethene	166	7.705	7.705	0.000	96	290621	20.0	18.1	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	389505	20.0	21.8	
77 2-Hexanone	43	7.777	7.777	0.000	95	501527	40.0	42.9	
79 Chlorodibromomethane	129	7.931	7.931	0.000	89	257661	20.0	19.3	
81 Ethylene Dibromide	107	8.049	8.049	0.000	98	244072	20.0	19.6	
83 Chlorobenzene	112	8.535	8.536	-0.001	95	698331	20.0	20.3	
84 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	96	247572	20.0	20.0	
85 Ethylbenzene	106	8.642	8.642	0.000	98	367795	20.0	20.5	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	454951	20.0	20.8	
87 o-Xylene	106	9.152	9.152	0.000	96	438575	20.0	21.1	
88 Styrene	104	9.164	9.164	0.000	93	736587	20.0	20.7	
89 Bromoform	173	9.354	9.354	0.000	97	188429	20.0	17.3	
90 Isopropylbenzene	105	9.532	9.532	0.000	95	1155922	20.0	20.7	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	95	356544	20.0	23.6	
95 Bromobenzene	156	9.852	9.852	0.000	91	290118	20.0	19.3	
96 1,2,3-Trichloropropane	110	9.876	9.876	0.000	85	122105	20.0	21.3	
97 trans-1,4-Dichloro-2-butene	53	9.876	9.876	0.000	79	100392	20.0	18.7	
98 N-Propylbenzene	120	9.947	9.947	0.000	99	317273	20.0	21.0	
100 2-Chlorotoluene	126	10.042	10.042	0.000	97	272650	20.0	21.3	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	95	931776	20.0	21.4	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	283703	20.0	20.5	
103 tert-Butylbenzene	119	10.480	10.480	0.000	91	808862	20.0	19.6	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	96	935512	20.0	21.2	
106 sec-Butylbenzene	105	10.706	10.706	0.000	94	1145753	20.0	20.6	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	532446	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	985969	20.0	20.2	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	544553	20.0	19.1	
112 n-Butylbenzene	91	11.287	11.287	0.000	98	806670	20.0	20.1	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	523646	20.0	20.9	
114 1,2-Dibromo-3-Chloropropane	157	12.129	12.129	0.000	88	95207	20.0	19.8	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	94	279392	20.0	16.7	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	121579	20.0	14.1	
118 Naphthalene	128	13.279	13.279	0.000	97	961122	20.0	20.8	
119 1,2,3-Trichlorobenzene	180	13.540	13.552	-0.012	96	278387	20.0	18.5	
S 125 Trihalomethanes, Total	1				0		80.0	75.1	
S 124 Total BTEX	1				0		100.0	105.3	
S 128 Xylenes, Total	106				0		40.0	41.9	

Reagents:

vmfasgw_00371	Amount Added:	16.00	Units: uL	
vmfasaw_00339	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

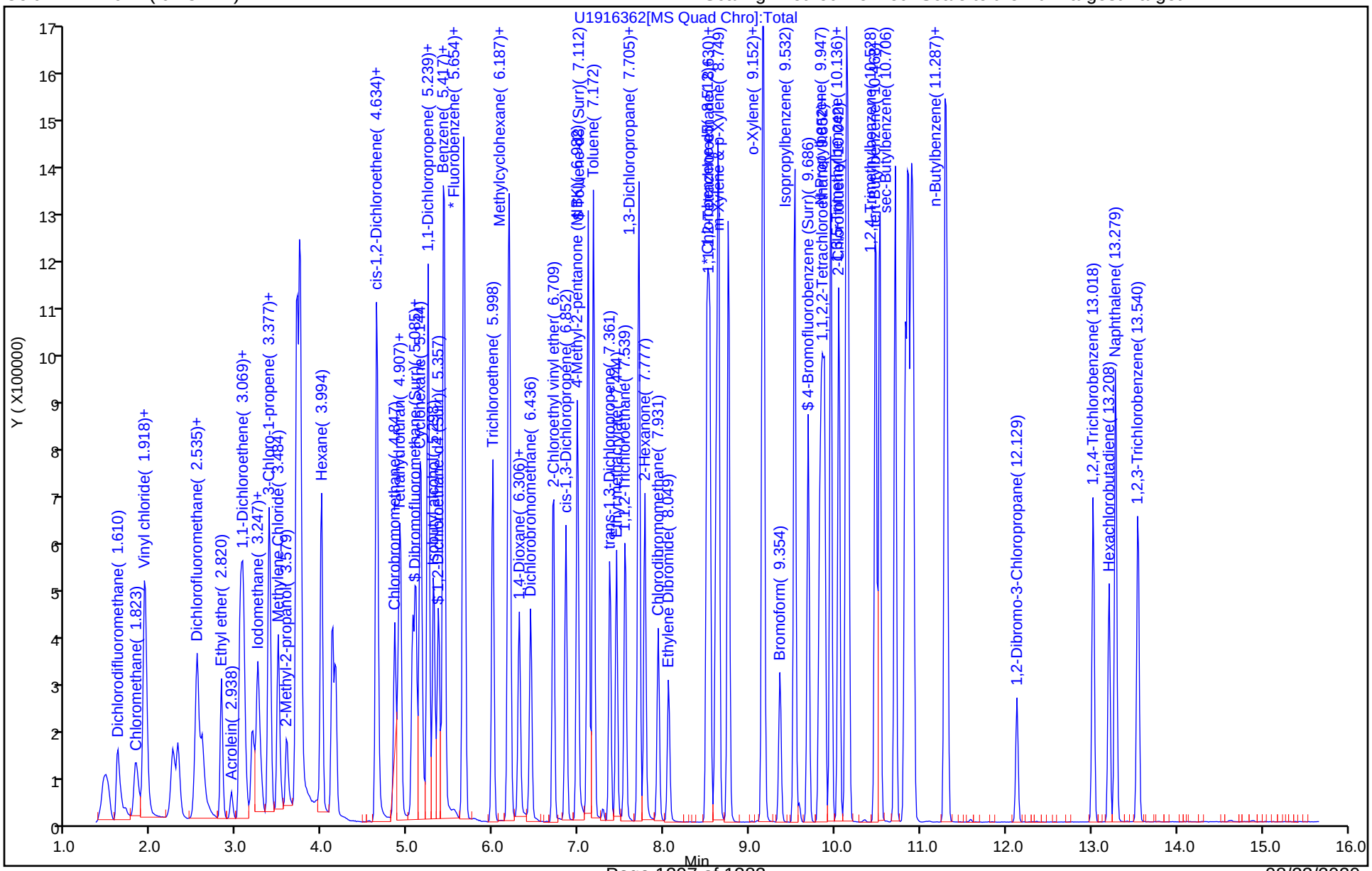
Report Date: 14-Aug-2020 19:04:41 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916362.d

Injection Date:	14-Aug-2020 18:29:02	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\U1916362.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Aug-2020 18:29:02 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101017-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200814-101017.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 14-Aug-2020 16:45:50 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: laveyt Date: 14-Aug-2020 19:04:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.2	95.83
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.6	92.77
$ 6 Toluene-d8 (Surr)	20.0	21.5	107.51
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.3	101.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447506/5

Matrix: Water Lab File ID: U1916392.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 18:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	20.2		1.0	0.41
71-55-6	1,1,1-Trichloroethane	18.4		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	24.2		1.0	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	19.9		1.0	0.41
75-34-3	1,1-Dichloroethane	21.1		1.0	0.41
75-35-4	1,1-Dichloroethene	19.4		1.0	0.46
563-58-6	1,1-Dichloropropene	20.6		1.0	0.37
87-61-6	1,2,3-Trichlorobenzene	18.8		1.0	0.54
96-18-4	1,2,3-Trichloropropane	21.0		1.0	0.51
120-82-1	1,2,4-Trichlorobenzene	17.3		1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	20.8		1.0	0.45
96-12-8	1,2-Dibromo-3-Chloropropane	20.9		5.0	0.91
95-50-1	1,2-Dichlorobenzene	20.8		1.0	0.43
107-06-2	1,2-Dichloroethane	18.4		1.0	0.43
78-87-5	1,2-Dichloropropane	21.6		1.0	0.37
541-73-1	1,3-Dichlorobenzene	19.4		1.0	0.40
142-28-9	1,3-Dichloropropane	21.8		1.0	0.21
106-46-7	1,4-Dichlorobenzene	18.8		1.0	0.37
594-20-7	2,2-Dichloropropane	23.5		1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	39.4		10	1.1
95-49-8	2-Chlorotoluene	21.0		1.0	0.42
591-78-6	2-Hexanone	44.7		5.0	2.1
108-86-1	Bromobenzene	18.6		1.0	0.38
74-97-5	Bromochloromethane	21.0		1.0	0.52
106-43-4	4-Chlorotoluene	20.1		1.0	0.44
99-87-6	p-Isopropyltoluene	19.8		1.0	0.49
67-64-1	Acetone	57.4		5.0	5.4
71-43-2	Benzene	21.5		1.0	0.38
75-25-2	Bromoform	18.0		1.0	0.76
74-83-9	Bromomethane	18.5		1.0	0.42
75-15-0	Carbon disulfide	19.7		1.0	0.28
56-23-5	Carbon tetrachloride	17.8		1.0	0.26
108-90-7	Chlorobenzene	20.3		1.0	0.32
75-00-3	Chloroethane	21.4		1.0	0.83
67-66-3	Chloroform	20.0		1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447506/5

Matrix: Water Lab File ID: U1916392.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 18:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20.4		1.0	0.64
156-59-2	cis-1,2-Dichloroethene	19.7		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	19.7		1.0	0.61
87-68-3	Hexachlorobutadiene	14.3		1.0	0.83
74-95-3	Dibromomethane	16.3		1.0	0.33
75-27-4	Bromodichloromethane	18.5		1.0	0.35
75-71-8	Dichlorodifluoromethane	17.5		1.0	0.35
100-41-4	Ethylbenzene	20.6		1.0	0.39
106-93-4	1,2-Dibromoethane	20.0		1.0	0.37
91-20-3	Naphthalene	21.6		1.0	0.82
179601-23-1	m-Xylene & p-Xylene	21.1		2.0	0.40
104-51-8	n-Butylbenzene	20.1		1.0	0.59
98-82-8	Isopropylbenzene	20.9		1.0	0.45
103-65-1	n-Propylbenzene	21.0		1.0	0.46
78-93-3	2-Butanone	45.4		5.0	2.4
108-10-1	4-Methyl-2-pentanone	43.7		5.0	2.1
135-98-8	sec-Butylbenzene	20.0		1.0	0.63
1634-04-4	Methyl tert-butyl ether	20.0		1.0	0.44
75-09-2	Methylene Chloride	20.8		5.0	1.3
95-47-6	o-Xylene	21.3		1.0	0.43
100-42-5	Styrene	21.0		1.0	0.40
98-06-6	tert-Butylbenzene	18.9		1.0	0.51
127-18-4	Tetrachloroethene	18.4		1.0	0.33
108-88-3	Toluene	21.9		1.0	0.35
156-60-5	trans-1,2-Dichloroethene	20.3		1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	19.9		1.0	0.67
79-01-6	Trichloroethene	18.3		1.0	0.36
75-69-4	Trichlorofluoromethane	17.0		1.0	0.45
108-05-4	Vinyl acetate	21.7		2.0	0.78
75-01-4	Vinyl chloride	21.4		0.50	0.50
75-65-0	tert-Butyl alcohol	338		20	1.7
1330-20-7	Xylenes, Total	42.4		2.0	0.42
124-48-1	Dibromochloromethane	19.4		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447506/5

Matrix: Water Lab File ID: U1916392.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 18:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		75-130
460-00-4	4-Bromofluorobenzene (Surr)	106		47-134
2037-26-5	Toluene-d8 (Surr)	109		69-122
1868-53-7	Dibromofluoromethane (Surr)	97		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916392.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-Aug-2020 18:09:16 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 16:26:26 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 18:39:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	999090	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	93	731543	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	94	400514	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.049	5.061	-0.012	94	260630	20.0	19.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	296583	20.0	19.2	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	956793	20.0	21.8	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	90	349833	20.0	21.2	
9 Dichlorodifluoromethane	85	1.598	1.610	-0.012	99	336713	20.0	17.5	
10 Chloromethane	50	1.811	1.823	-0.012	99	293124	20.0	20.4	
12 Vinyl chloride	62	1.906	1.918	-0.012	76	317886	20.0	21.4	
11 Butadiene	54	1.918	1.918	0.000	89	308667	20.0	21.4	
13 Bromomethane	94	2.250	2.250	0.000	91	215841	20.0	18.5	
15 Chloroethane	64	2.310	2.321	-0.011	99	197849	20.0	21.4	
16 Dichlorofluoromethane	67	2.523	2.523	0.000	97	450003	20.0	19.7	
17 Trichlorofluoromethane	101	2.535	2.547	-0.012	98	422384	20.0	17.0	
18 Ethyl ether	59	2.808	2.820	-0.012	90	205959	20.0	22.9	
19 Acrolein	56	2.926	2.938	-0.012	99	100425	100.0	45.2	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	347173	20.0	19.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.057	3.069	-0.012	94	255848	20.0	19.9	
22 Acetone	43	3.080	3.080	0.000	100	224818	40.0	57.4	
24 Iodomethane	142	3.175	3.187	-0.012	100	406374	20.0	17.5	
25 Carbon disulfide	76	3.246	3.246	0.000	99	739547	20.0	19.7	
27 3-Chloro-1-propene	41	3.365	3.377	-0.012	90	337534	20.0	19.1	
28 Methyl acetate	43	3.389	3.389	0.000	97	533849	40.0	45.9	
29 Methylene Chloride	49	3.472	3.484	-0.012	89	295905	20.0	20.8	
30 2-Methyl-2-propanol	59	3.578	3.590	-0.012	98	456613	200.0	337.5	
31 Acrylonitrile	53	3.697	3.697	0.000	98	1367267	200.0	272.2	
32 trans-1,2-Dichloroethene	61	3.733	3.744	-0.011	71	343412	20.0	20.3	
33 Methyl tert-butyl ether	73	3.733	3.744	-0.011	94	692716	20.0	20.0	
34 Hexane	57	3.982	3.994	-0.012	90	355375	20.0	20.2	
35 1,1-Dichloroethane	63	4.112	4.124	-0.012	96	427435	20.0	21.1	
36 Vinyl acetate	43	4.148	4.160	-0.012	97	503359	20.0	21.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	80	284904	20.0	19.7	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	97	107068	40.0	45.4	
42 2,2-Dichloropropane	77	4.634	4.646	-0.012	61	285694	20.0	23.5	
46 Chlorobromomethane	49	4.847	4.847	0.000	91	204095	20.0	21.0	
47 Tetrahydrofuran	42	4.883	4.895	-0.012	85	282394	40.0	55.4	
48 Chloroform	83	4.907	4.919	-0.011	92	442907	20.0	20.0	
49 1,1,1-Trichloroethane	97	5.084	5.096	-0.012	98	383471	20.0	18.4	
50 Cyclohexane	84	5.144	5.156	-0.012	91	389951	20.0	20.4	
51 1,1-Dichloropropene	75	5.239	5.239	0.000	98	361764	20.0	20.6	
52 Carbon tetrachloride	117	5.239	5.239	0.000	96	358414	20.0	17.8	
53 Isobutyl alcohol	41	5.298	5.298	0.000	93	395953	500.0	721.7	
54 Benzene	78	5.416	5.417	-0.001	95	1023558	20.0	21.5	
55 1,2-Dichloroethane	62	5.428	5.428	0.000	98	330150	20.0	18.4	
57 n-Heptane	57	5.642	5.654	-0.012	90	179366	20.0	15.8	
59 Trichloroethene	130	5.998	5.998	0.000	97	288826	20.0	18.3	
61 Methylcyclohexane	83	6.175	6.176	-0.001	91	429355	20.0	18.7	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	97	238325	20.0	21.6	
65 1,4-Dioxane	88	6.306	6.306	0.000	92	96181	400.0	805.8	
64 Dibromomethane	174	6.306	6.306	0.000	94	185006	20.0	16.3	
66 Dichlorobromomethane	83	6.436	6.436	0.000	99	321615	20.0	18.5	
68 2-Chloroethyl vinyl ether	63	6.697	6.709	-0.012	92	348758	20.0	39.4	
69 cis-1,3-Dichloropropene	75	6.851	6.851	0.000	96	380025	20.0	19.7	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	95	698565	40.0	43.7	
71 Toluene	91	7.172	7.172	0.000	98	1082744	20.0	21.9	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	350031	20.0	19.9	
73 Ethyl methacrylate	69	7.444	7.444	0.000	88	334962	20.0	21.1	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	90	227211	20.0	21.9	
75 Tetrachloroethene	166	7.705	7.705	0.000	96	289921	20.0	18.4	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	382672	20.0	21.8	
77 2-Hexanone	43	7.776	7.776	0.000	94	515002	40.0	44.7	
79 Chlorodibromomethane	129	7.931	7.931	0.000	90	254598	20.0	19.4	
81 Ethylene Dibromide	107	8.049	8.049	0.000	98	244576	20.0	20.0	
83 Chlorobenzene	112	8.535	8.535	0.000	97	688033	20.0	20.3	
84 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	96	246743	20.0	20.2	
85 Ethylbenzene	106	8.642	8.642	0.000	98	365126	20.0	20.6	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	100	455288	20.0	21.1	
87 o-Xylene	106	9.152	9.152	0.000	96	436907	20.0	21.3	
88 Styrene	104	9.164	9.164	0.000	93	736573	20.0	21.0	
89 Bromoform	173	9.354	9.354	0.000	97	192915	20.0	18.0	
90 Isopropylbenzene	105	9.531	9.532	-0.001	96	1146574	20.0	20.9	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	94	373164	20.0	24.2	
95 Bromobenzene	156	9.852	9.852	0.000	92	286713	20.0	18.6	
96 1,2,3-Trichloropropane	110	9.875	9.875	0.000	85	123005	20.0	21.0	
97 trans-1,4-Dichloro-2-butene	53	9.875	9.875	0.000	74	104265	20.0	19.0	
98 N-Propylbenzene	120	9.946	9.947	-0.001	99	324901	20.0	21.0	
100 2-Chlorotoluene	126	10.041	10.041	0.000	97	275687	20.0	21.0	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	95	937154	20.0	21.0	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	284320	20.0	20.1	
103 tert-Butylbenzene	119	10.480	10.480	0.000	92	798133	20.0	18.9	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	96	939970	20.0	20.8	
106 sec-Butylbenzene	105	10.705	10.706	-0.001	94	1142119	20.0	20.0	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	549899	20.0	19.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	986268	20.0	19.8	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	549990	20.0	18.8	
112 n-Butylbenzene	91	11.287	11.287	0.000	98	823194	20.0	20.1	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	534234	20.0	20.8	
114 1,2-Dibromo-3-Chloropropane	157	12.128	12.129	-0.001	88	102584	20.0	20.9	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	93	295709	20.0	17.3	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	126145	20.0	14.3	
118 Naphthalene	128	13.279	13.279	0.000	97	1020303	20.0	21.6	
119 1,2,3-Trichlorobenzene	180	13.552	13.540	0.012	96	288507	20.0	18.8	
S 125 Trihalomethanes, Total	1				0		80.0	75.9	
S 124 Total BTEX	1				0		100.0	106.5	
S 128 Xylenes, Total	106				0		40.0	42.5	

Reagents:

vmfasgw_00371	Amount Added: 16.00	Units: uL		
vmfasaw_00340	Amount Added: 16.00	Units: uL		
vmfaspw_00362	Amount Added: 16.00	Units: uL		
vm50ss_stk_00085	Amount Added: 2.00	Units: uL	Run Reagent	
vmDist_H2o_00178	Amount Added: 0.00	Units:	Run Reagent	
vm40ml_vials_00015	Amount Added: 0.00	Units:	Run Reagent	
vm50is_stk_A_00007	Amount Added: 2.00	Units: uL	Run Reagent	

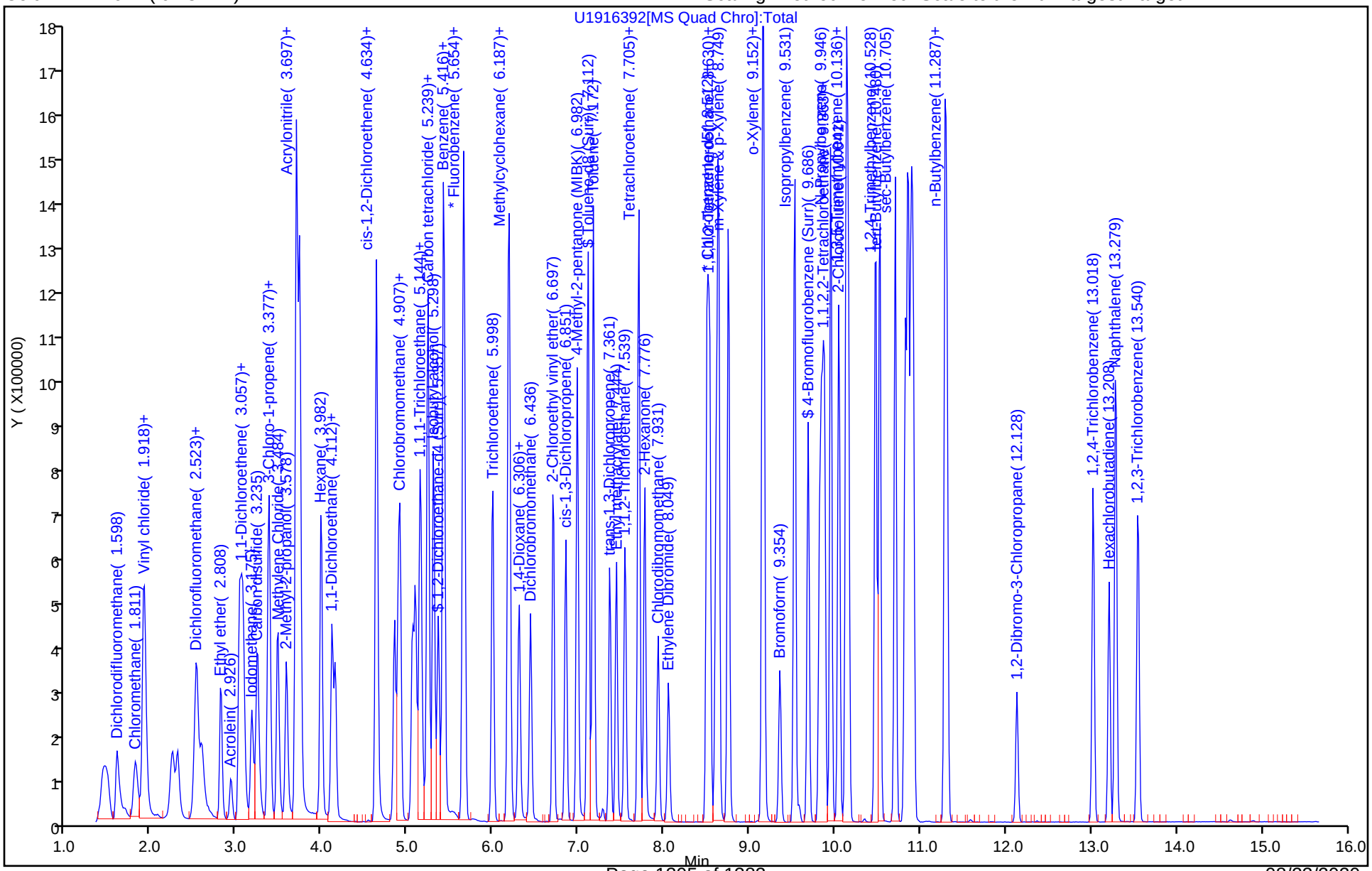
Report Date: 17-Aug-2020 18:39:46 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916392.d

Injection Date:	17-Aug-2020 18:09:16	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916392.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-Aug-2020 18:09:16 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101080-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 16:26:26 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 18:39:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.4	96.90
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.2	96.01
$ 6 Toluene-d8 (Surr)	20.0	21.8	109.06
$ 7 4-Bromofluorobenzene (Surr)	20.0	21.2	105.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447698/5

Matrix: Water Lab File ID: U1916422.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 19:50

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	19.3		1.0	0.41
71-55-6	1,1,1-Trichloroethane	15.8		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	23.3		1.0	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	17.1		1.0	0.41
75-34-3	1,1-Dichloroethane	19.9		1.0	0.41
75-35-4	1,1-Dichloroethene	16.9		1.0	0.46
563-58-6	1,1-Dichloropropene	17.8		1.0	0.37
87-61-6	1,2,3-Trichlorobenzene	18.1		1.0	0.54
96-18-4	1,2,3-Trichloropropane	20.9		1.0	0.51
120-82-1	1,2,4-Trichlorobenzene	16.1		1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	19.5		1.0	0.45
96-12-8	1,2-Dibromo-3-Chloropropane	19.9		5.0	0.91
95-50-1	1,2-Dichlorobenzene	20.1		1.0	0.43
107-06-2	1,2-Dichloroethane	18.1		1.0	0.43
78-87-5	1,2-Dichloropropane	20.7		1.0	0.37
541-73-1	1,3-Dichlorobenzene	18.4		1.0	0.40
142-28-9	1,3-Dichloropropane	21.5		1.0	0.21
106-46-7	1,4-Dichlorobenzene	18.2		1.0	0.37
594-20-7	2,2-Dichloropropane	18.3		1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	39.8		10	1.1
95-49-8	2-Chlorotoluene	19.5		1.0	0.42
591-78-6	2-Hexanone	43.7		5.0	2.1
108-86-1	Bromobenzene	18.1		1.0	0.38
74-97-5	Bromochloromethane	20.1		1.0	0.52
106-43-4	4-Chlorotoluene	19.0		1.0	0.44
99-87-6	p-Isopropyltoluene	17.5		1.0	0.49
67-64-1	Acetone	52.6		5.0	5.4
71-43-2	Benzene	20.1		1.0	0.38
75-25-2	Bromoform	17.1		1.0	0.76
74-83-9	Bromomethane	19.1		1.0	0.42
75-15-0	Carbon disulfide	17.0		1.0	0.28
56-23-5	Carbon tetrachloride	14.9		1.0	0.26
108-90-7	Chlorobenzene	19.2		1.0	0.32
75-00-3	Chloroethane	22.1		1.0	0.83
67-66-3	Chloroform	19.4		1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447698/5

Matrix: Water Lab File ID: U1916422.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 19:50

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	22.2		1.0	0.64
156-59-2	cis-1,2-Dichloroethene	18.7		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	19.3		1.0	0.61
87-68-3	Hexachlorobutadiene	13.0		1.0	0.83
74-95-3	Dibromomethane	15.7		1.0	0.33
75-27-4	Bromodichloromethane	17.9		1.0	0.35
75-71-8	Dichlorodifluoromethane	19.9		1.0	0.35
100-41-4	Ethylbenzene	18.5		1.0	0.39
106-93-4	1,2-Dibromoethane	19.3		1.0	0.37
91-20-3	Naphthalene	20.8		1.0	0.82
179601-23-1	m-Xylene & p-Xylene	19.3		2.0	0.40
104-51-8	n-Butylbenzene	17.5		1.0	0.59
98-82-8	Isopropylbenzene	18.2		1.0	0.45
103-65-1	n-Propylbenzene	18.5		1.0	0.46
78-93-3	2-Butanone	43.3		5.0	2.4
108-10-1	4-Methyl-2-pentanone	42.5		5.0	2.1
135-98-8	sec-Butylbenzene	17.4		1.0	0.63
1634-04-4	Methyl tert-butyl ether	18.5		1.0	0.44
75-09-2	Methylene Chloride	20.1		5.0	1.3
95-47-6	o-Xylene	19.7		1.0	0.43
100-42-5	Styrene	20.2		1.0	0.40
98-06-6	tert-Butylbenzene	16.6		1.0	0.51
127-18-4	Tetrachloroethene	16.0		1.0	0.33
108-88-3	Toluene	20.1		1.0	0.35
156-60-5	trans-1,2-Dichloroethene	18.7		1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	19.4		1.0	0.67
79-01-6	Trichloroethene	16.4		1.0	0.36
75-69-4	Trichlorofluoromethane	17.5		1.0	0.45
108-05-4	Vinyl acetate	20.8		2.0	0.78
75-01-4	Vinyl chloride	22.2		0.50	0.50
75-65-0	tert-Butyl alcohol	265		20	1.7
1330-20-7	Xylenes, Total	39.0		2.0	0.42
124-48-1	Dibromochloromethane	18.9		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447698/5

Matrix: Water Lab File ID: U1916422.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/18/2020 19:50

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447698 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		75-130
460-00-4	4-Bromofluorobenzene (Surr)	105		47-134
2037-26-5	Toluene-d8 (Surr)	110		69-122
1868-53-7	Dibromofluoromethane (Surr)	99		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916422.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Aug-2020 19:50:12 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 18:08:07 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 20:14:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	977757	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	85	723764	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	93	393016	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.049	0.012	93	261534	20.0	19.9	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	98	291874	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	950753	20.0	21.9	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	342330	20.0	21.0	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	373669	20.0	19.9	
10 Chloromethane	50	1.823	1.823	0.000	99	313210	20.0	22.2	
12 Vinyl chloride	62	1.930	1.918	0.012	80	324073	20.0	22.2	
11 Butadiene	54	1.930	1.918	0.012	89	311661	20.0	22.1	
13 Bromomethane	94	2.250	2.250	0.000	91	218295	20.0	19.1	
15 Chloroethane	64	2.321	2.310	0.011	99	199987	20.0	22.1	
16 Dichlorofluoromethane	67	2.523	2.523	0.000	97	452767	20.0	20.2	
17 Trichlorofluoromethane	101	2.535	2.535	0.000	98	426210	20.0	17.5	
18 Ethyl ether	59	2.819	2.820	-0.001	89	196296	20.0	22.3	
19 Acrolein	56	2.938	2.938	0.000	100	88508	100.0	40.7	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	297200	20.0	16.9	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.080	3.069	0.011	85	214985	20.0	17.1	
22 Acetone	43	3.080	3.080	0.000	100	201555	40.0	52.6	
24 Iodomethane	142	3.175	3.175	0.000	99	373461	20.0	16.4	
25 Carbon disulfide	76	3.246	3.246	0.000	99	625232	20.0	17.0	
27 3-Chloro-1-propene	41	3.377	3.365	0.012	91	311320	20.0	18.0	
28 Methyl acetate	43	3.389	3.389	0.000	97	520414	40.0	45.7	
29 Methylene Chloride	49	3.483	3.484	-0.001	88	280284	20.0	20.1	
30 2-Methyl-2-propanol	59	3.578	3.578	0.000	97	350911	200.0	265.1	
31 Acrylonitrile	53	3.697	3.697	0.000	98	1271015	200.0	258.5	
32 trans-1,2-Dichloroethene	61	3.732	3.733	-0.001	71	310427	20.0	18.7	
33 Methyl tert-butyl ether	73	3.744	3.744	0.000	94	627383	20.0	18.5	
34 Hexane	57	3.993	3.994	-0.001	90	311535	20.0	18.1	
35 1,1-Dichloroethane	63	4.112	4.112	0.000	96	392984	20.0	19.9	
36 Vinyl acetate	43	4.159	4.148	0.011	97	472138	20.0	20.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	81	263655	20.0	18.7	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	97	100045	40.0	43.3	
42 2,2-Dichloropropane	77	4.634	4.634	0.000	78	218155	20.0	18.3	
46 Chlorobromomethane	49	4.847	4.847	0.000	90	191447	20.0	20.1	
47 Tetrahydrofuran	42	4.895	4.895	0.000	85	290474	40.0	58.4	
48 Chloroform	83	4.918	4.907	0.011	93	420085	20.0	19.4	
49 1,1,1-Trichloroethane	97	5.096	5.085	0.012	98	322909	20.0	15.8	
50 Cyclohexane	84	5.144	5.144	0.000	93	316477	20.0	16.9	
51 1,1-Dichloropropene	75	5.239	5.239	0.000	97	305712	20.0	17.8	
52 Carbon tetrachloride	117	5.239	5.239	0.000	96	292136	20.0	14.9	
53 Isobutyl alcohol	41	5.298	5.298	0.000	94	379544	500.0	706.9	
54 Benzene	78	5.416	5.417	-0.001	95	933368	20.0	20.1	
55 1,2-Dichloroethane	62	5.428	5.428	0.000	97	319317	20.0	18.1	
57 n-Heptane	57	5.654	5.654	0.000	88	161424	20.0	14.3	
59 Trichloroethene	130	5.997	5.998	-0.001	98	253458	20.0	16.4	
61 Methylcyclohexane	83	6.175	6.176	-0.001	92	344685	20.0	15.4	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	96	223163	20.0	20.7	
65 1,4-Dioxane	88	6.306	6.306	0.000	90	87124	400.0	745.8	
64 Dibromomethane	174	6.306	6.306	0.000	93	174462	20.0	15.7	
66 Dichlorobromomethane	83	6.436	6.436	0.000	100	304246	20.0	17.9	
68 2-Chloroethyl vinyl ether	63	6.709	6.697	0.012	92	344793	20.0	39.8	
69 cis-1,3-Dichloropropene	75	6.851	6.851	0.000	96	364627	20.0	19.3	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	95	665955	40.0	42.5	
71 Toluene	91	7.172	7.172	0.000	98	984600	20.0	20.1	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	337731	20.0	19.4	
73 Ethyl methacrylate	69	7.444	7.444	0.000	87	320107	20.0	20.4	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	219631	20.0	21.4	
75 Tetrachloroethene	166	7.705	7.705	0.000	96	249381	20.0	16.0	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	89	373476	20.0	21.5	
77 2-Hexanone	43	7.776	7.776	0.000	94	497529	40.0	43.7	
79 Chlorodibromomethane	129	7.930	7.931	-0.001	90	245127	20.0	18.9	
81 Ethylene Dibromide	107	8.049	8.049	0.000	99	233237	20.0	19.3	
83 Chlorobenzene	112	8.535	8.535	0.000	96	644237	20.0	19.2	
84 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	95	232843	20.0	19.3	
85 Ethylbenzene	106	8.642	8.642	0.000	98	324440	20.0	18.5	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	410581	20.0	19.3	
87 o-Xylene	106	9.152	9.152	0.000	97	399046	20.0	19.7	
88 Styrene	104	9.164	9.164	0.000	94	699608	20.0	20.2	
89 Bromoform	173	9.353	9.354	-0.001	97	181976	20.0	17.1	
90 Isopropylbenzene	105	9.531	9.532	-0.001	95	991667	20.0	18.2	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	95	352544	20.0	23.3	
95 Bromobenzene	156	9.852	9.852	0.000	91	273870	20.0	18.1	
96 1,2,3-Trichloropropane	110	9.875	9.875	0.000	86	120110	20.0	20.9	
97 trans-1,4-Dichloro-2-butene	53	9.875	9.875	0.000	81	99860	20.0	18.6	
98 N-Propylbenzene	120	9.946	9.947	-0.001	99	281362	20.0	18.5	
100 2-Chlorotoluene	126	10.041	10.041	0.000	97	251129	20.0	19.5	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	96	832303	20.0	19.0	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	264752	20.0	19.0	
103 tert-Butylbenzene	119	10.480	10.480	0.000	91	688429	20.0	16.6	
105 1,2,4-Trimethylbenzene	105	10.527	10.528	-0.001	96	865106	20.0	19.5	
106 sec-Butylbenzene	105	10.705	10.706	-0.001	94	972146	20.0	17.4	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	511619	20.0	18.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	855550	20.0	17.5	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	523060	20.0	18.2	
112 n-Butylbenzene	91	11.286	11.287	-0.001	98	706310	20.0	17.5	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	506375	20.0	20.1	
114 1,2-Dibromo-3-Chloropropane	157	12.128	12.129	-0.001	87	95893	20.0	19.9	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	94	270595	20.0	16.1	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	96	112488	20.0	13.0	
118 Naphthalene	128	13.291	13.279	0.012	97	963618	20.0	20.8	
119 1,2,3-Trichlorobenzene	180	13.551	13.552	-0.001	95	273722	20.0	18.1	
S 125 Trihalomethanes, Total	1				0		80.0	73.3	
S 124 Total BTEX	1				0		100.0	97.7	
S 128 Xylenes, Total	106				0		40.0	39.0	

Reagents:

vmfasgw_00372	Amount Added:	16.00	Units: uL	
vmfasaw_00340	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

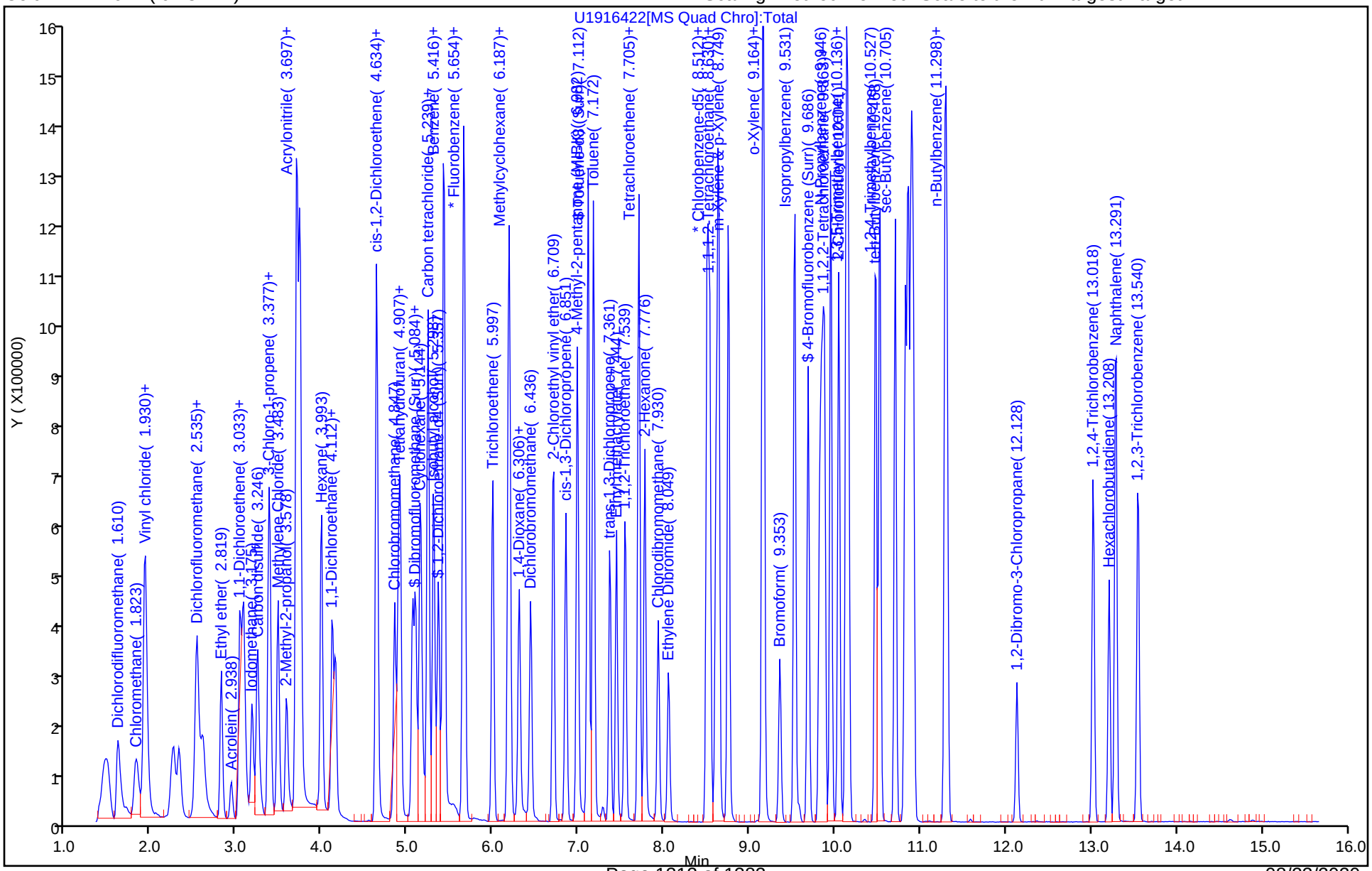
Report Date: 18-Aug-2020 20:14:16 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916422.d

Injection Date:	18-Aug-2020 19:50:12	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\U1916422.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Aug-2020 19:50:12 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101119-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200818-101119.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 18-Aug-2020 18:08:07 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 18-Aug-2020 20:14:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.9	99.36
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.54
$ 6 Toluene-d8 (Surr)	20.0	21.9	109.53
$ 7 4-Bromofluorobenzene (Surr)	20.0	21.0	104.81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447867/5

Matrix: Water Lab File ID: U1279809.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 16:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	20.5		1.0	0.41
71-55-6	1,1,1-Trichloroethane	19.8		1.0	0.24
79-34-5	1,1,2,2-Tetrachloroethane	21.4		1.0	0.56
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	21.7		1.0	0.41
75-34-3	1,1-Dichloroethane	20.7		1.0	0.41
75-35-4	1,1-Dichloroethene	21.1		1.0	0.46
563-58-6	1,1-Dichloropropene	20.7		1.0	0.37
87-61-6	1,2,3-Trichlorobenzene	23.0		1.0	0.54
96-18-4	1,2,3-Trichloropropane	21.0		1.0	0.51
120-82-1	1,2,4-Trichlorobenzene	22.7		1.0	0.81
95-63-6	1,2,4-Trimethylbenzene	21.6		1.0	0.45
96-12-8	1,2-Dibromo-3-Chloropropane	23.5		5.0	0.91
95-50-1	1,2-Dichlorobenzene	20.4		1.0	0.43
107-06-2	1,2-Dichloroethane	18.3		1.0	0.43
78-87-5	1,2-Dichloropropane	21.5		1.0	0.37
541-73-1	1,3-Dichlorobenzene	21.0		1.0	0.40
142-28-9	1,3-Dichloropropane	20.5		1.0	0.21
106-46-7	1,4-Dichlorobenzene	20.3		1.0	0.37
594-20-7	2,2-Dichloropropane	19.4		1.0	0.95
110-75-8	2-Chloroethyl vinyl ether	44.3		10	1.1
95-49-8	2-Chlorotoluene	21.2		1.0	0.42
591-78-6	2-Hexanone	45.2		5.0	2.1
108-86-1	Bromobenzene	21.0		1.0	0.38
74-97-5	Bromochloromethane	18.4		1.0	0.52
106-43-4	4-Chlorotoluene	21.0		1.0	0.44
99-87-6	p-Isopropyltoluene	23.0		1.0	0.49
67-64-1	Acetone	43.5		5.0	5.4
71-43-2	Benzene	19.7		1.0	0.38
75-25-2	Bromoform	21.4		1.0	0.76
74-83-9	Bromomethane	18.4		1.0	0.42
75-15-0	Carbon disulfide	21.6		1.0	0.28
56-23-5	Carbon tetrachloride	20.0		1.0	0.26
108-90-7	Chlorobenzene	20.7		1.0	0.32
75-00-3	Chloroethane	19.1		1.0	0.83
67-66-3	Chloroform	18.5		1.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447867/5

Matrix: Water Lab File ID: U1279809.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 16:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	22.4		1.0	0.64
156-59-2	cis-1,2-Dichloroethene	17.0		1.0	0.38
10061-01-5	cis-1,3-Dichloropropene	21.2		1.0	0.61
87-68-3	Hexachlorobutadiene	22.1		1.0	0.83
74-95-3	Dibromomethane	18.7		1.0	0.33
75-27-4	Bromodichloromethane	20.0		1.0	0.35
75-71-8	Dichlorodifluoromethane	23.9		1.0	0.35
100-41-4	Ethylbenzene	21.9		1.0	0.39
106-93-4	1,2-Dibromoethane	20.1		1.0	0.37
91-20-3	Naphthalene	24.0		1.0	0.82
179601-23-1	m-Xylene & p-Xylene	22.0		2.0	0.40
104-51-8	n-Butylbenzene	23.1		1.0	0.59
98-82-8	Isopropylbenzene	21.6		1.0	0.45
103-65-1	n-Propylbenzene	23.1		1.0	0.46
78-93-3	2-Butanone	40.6		5.0	2.4
108-10-1	4-Methyl-2-pentanone	43.4		5.0	2.1
135-98-8	sec-Butylbenzene	22.2		1.0	0.63
1634-04-4	Methyl tert-butyl ether	20.0		1.0	0.44
75-09-2	Methylene Chloride	21.5		5.0	1.3
95-47-6	o-Xylene	20.7		1.0	0.43
100-42-5	Styrene	21.3		1.0	0.40
98-06-6	tert-Butylbenzene	22.4		1.0	0.51
127-18-4	Tetrachloroethene	20.3		1.0	0.33
108-88-3	Toluene	20.2		1.0	0.35
156-60-5	trans-1,2-Dichloroethene	21.9		1.0	0.43
10061-02-6	trans-1,3-Dichloropropene	21.1		1.0	0.67
79-01-6	Trichloroethene	20.6		1.0	0.36
75-69-4	Trichlorofluoromethane	19.1		1.0	0.45
108-05-4	Vinyl acetate	18.5		2.0	0.78
75-01-4	Vinyl chloride	21.9		0.50	0.50
75-65-0	tert-Butyl alcohol	234		20	1.7
1330-20-7	Xylenes, Total	42.7		2.0	0.42
124-48-1	Dibromochloromethane	20.1		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: LCS 240-447867/5

Matrix: Water Lab File ID: U1279809.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 16:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447867 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		75-130
460-00-4	4-Bromofluorobenzene (Surr)	107		47-134
2037-26-5	Toluene-d8 (Surr)	100		69-122
1868-53-7	Dibromofluoromethane (Surr)	89		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279809.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Aug-2020 16:31:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-005
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 15:09:30 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1007

First Level Reviewer: laveyt Date: 19-Aug-2020 17:27:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	997670	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	91	699753	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.971	9.970	0.001	92	354239	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	234890	20.0	17.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.811	0.012	96	291522	20.0	18.0	
$ 6 Toluene-d8 (Surr)	98	6.456	6.444	0.012	93	950339	20.0	20.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.846	8.858	-0.012	92	347420	20.0	21.4	
9 Dichlorodifluoromethane	85	1.403	1.392	0.011	99	371754	20.0	23.9	
10 Chloromethane	50	1.593	1.581	0.012	99	593252	20.0	22.4	
11 Butadiene	54	1.640	1.640	0.000	90	456541	20.0	24.9	
12 Vinyl chloride	62	1.687	1.676	0.011	98	407977	20.0	21.9	
14 Bromomethane	94	1.924	1.924	0.000	91	227447	20.0	18.4	
15 Chloroethane	64	1.983	1.983	0.000	99	259725	20.0	19.1	
16 Dichlorofluoromethane	67	2.173	2.161	0.012	97	520448	20.0	18.3	
17 Trichlorofluoromethane	101	2.184	2.173	0.011	97	417180	20.0	19.1	
19 Ethyl ether	59	2.433	2.433	0.000	92	271077	20.0	17.9	
20 Acrolein	56	2.551	2.551	0.000	99	94747	100.0	72.6	
21 1,1-Dichloroethene	61	2.634	2.622	0.012	97	422243	20.0	21.1	
22 112TCTFE	101	2.658	2.658	0.000	94	255463	20.0	21.7	
23 Acetone	43	2.681	2.681	0.000	100	276551	40.0	43.5	
24 Iodomethane	142	2.764	2.764	0.000	97	392679	20.0	19.2	
25 Carbon disulfide	76	2.812	2.812	0.000	99	872133	20.0	21.6	
27 3-Chloro-1-propene	41	2.954	2.942	0.012	92	521626	20.0	23.2	
28 Methyl acetate	43	2.965	2.965	0.000	98	742105	40.0	48.5	
29 Methylene Chloride	49	3.060	3.048	0.012	96	393715	20.0	21.5	
30 2-Methyl-2-propanol	59	3.167	3.166	0.001	100	443935	200.0	234.3	
31 Acrylonitrile	53	3.273	3.273	0.000	99	1698410	200.0	214.3	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	97	421107	20.0	21.9	
33 Methyl tert-butyl ether	73	3.285	3.285	0.000	96	885170	20.0	20.0	
34 Hexane	57	3.510	3.510	0.000	92	499474	20.0	23.4	
35 1,1-Dichloroethane	63	3.652	3.640	0.012	96	530727	20.0	20.7	
36 Vinyl acetate	43	3.687	3.687	0.000	97	669255	20.0	18.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2,2-Dichloropropane	77	4.137	4.125	0.012	61	340945	20.0	19.4	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	83	304895	20.0	17.0	
42 2-Butanone (MEK)	72	4.149	4.149	0.000	100	127880	40.0	40.6	
46 Chlorobromomethane	49	4.338	4.326	0.012	97	269085	20.0	18.4	
47 Tetrahydrofuran	42	4.374	4.373	0.001	90	584268	40.0	72.7	
48 Chloroform	83	4.397	4.397	0.000	93	468837	20.0	18.5	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	399334	20.0	19.8	
50 Cyclohexane	84	4.598	4.598	0.000	92	493772	20.0	20.7	
51 1,1-Dichloropropene	75	4.693	4.681	0.012	95	425196	20.0	20.7	
52 Carbon tetrachloride	117	4.693	4.693	0.000	76	327657	20.0	20.0	
53 Isobutyl alcohol	41	4.788	4.788	0.000	95	473000	500.0	587.8	
54 Benzene	78	4.859	4.859	0.000	96	1209557	20.0	19.7	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	97	364366	20.0	18.3	
57 n-Heptane	57	5.072	5.072	0.000	93	238125	20.0	22.1	
59 Trichloroethene	130	5.403	5.403	0.000	97	284697	20.0	20.6	
61 Methylcyclohexane	83	5.569	5.569	0.000	91	535204	20.0	22.1	
62 1,2-Dichloropropane	63	5.604	5.592	0.012	93	284359	20.0	21.5	
64 Dibromomethane	174	5.699	5.699	0.000	94	175771	20.0	18.7	
65 1,4-Dioxane	88	5.711	5.711	0.000	95	79452	400.0	460.5	
66 Dichlorobromomethane	83	5.829	5.829	0.000	99	330301	20.0	20.0	
68 2-Chloroethyl vinyl ether	63	6.089	6.089	0.000	92	440825	20.0	44.3	
69 cis-1,3-Dichloropropene	75	6.219	6.219	0.000	95	443355	20.0	21.2	
70 4-Methyl-2-pentanone (MIBK)	43	6.350	6.350	0.000	97	940785	40.0	43.4	
71 Toluene	91	6.503	6.503	0.000	99	1170782	20.0	20.2	
72 trans-1,3-Dichloropropene	75	6.705	6.705	0.000	94	397085	20.0	21.1	
74 Ethyl methacrylate	69	6.776	6.776	0.000	91	419691	20.0	22.1	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	224515	20.0	19.7	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	281481	20.0	20.3	
77 1,3-Dichloropropane	76	7.024	7.024	0.000	91	436384	20.0	20.5	
78 2-Hexanone	43	7.083	7.083	0.000	97	687480	40.0	45.2	
80 Chlorodibromomethane	129	7.225	7.225	0.000	91	224207	20.0	20.1	
81 Ethylene Dibromide	107	7.332	7.332	0.000	99	236735	20.0	20.1	
83 Chlorobenzene	112	7.781	7.781	0.000	95	703906	20.0	20.7	
84 1,1,1,2-Tetrachloroethane	131	7.852	7.852	0.000	95	236727	20.0	20.5	
85 Ethylbenzene	106	7.876	7.876	0.000	98	408166	20.0	21.9	
86 m-Xylene & p-Xylene	106	7.983	7.982	0.001	99	508680	20.0	22.0	
87 o-Xylene	106	8.361	8.361	0.000	94	492173	20.0	20.7	
88 Styrene	104	8.373	8.373	0.000	96	812067	20.0	21.3	
89 Bromoform	173	8.551	8.550	0.001	97	164633	20.0	21.4	
90 Isopropylbenzene	105	8.704	8.704	0.000	96	1285481	20.0	21.6	
92 Bromobenzene	156	9.000	9.000	0.000	94	291131	20.0	21.0	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	82	378787	20.0	21.4	
94 1,2,3-Trichloropropane	110	9.036	9.036	0.000	86	128230	20.0	21.0	
95 trans-1,4-Dichloro-2-butene	53	9.048	9.047	0.001	92	99541	20.0	19.2	
96 N-Propylbenzene	120	9.095	9.095	0.000	99	348277	20.0	23.1	
97 2-Chlorotoluene	126	9.190	9.189	0.001	97	281798	20.0	21.2	
98 1,3,5-Trimethylbenzene	105	9.272	9.272	0.000	96	1011547	20.0	22.8	
99 4-Chlorotoluene	126	9.284	9.284	0.000	99	286602	20.0	21.0	
102 tert-Butylbenzene	119	9.580	9.580	0.000	92	870932	20.0	22.4	
104 1,2,4-Trimethylbenzene	105	9.627	9.627	0.000	97	1008463	20.0	21.6	
105 sec-Butylbenzene	105	9.793	9.793	0.000	95	1251297	20.0	22.2	
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	551746	20.0	21.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.947	9.935	0.012	97	1079543	20.0	23.0	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	552757	20.0	20.3	
111 n-Butylbenzene	91	10.337	10.337	0.000	97	908757	20.0	23.1	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	533168	20.0	20.4	
113 1,2-Dibromo-3-Chloropropane	157	11.130	11.130	0.000	86	97300	20.0	23.5	
115 1,2,4-Trichlorobenzene	180	11.947	11.947	0.001	94	325685	20.0	22.7	
116 Hexachlorobutadiene	225	12.124	12.124	0.000	95	121318	20.0	22.1	
117 Naphthalene	128	12.195	12.195	0.000	97	1140334	20.0	24.0	
118 1,2,3-Trichlorobenzene	180	12.432	12.432	0.000	96	304400	20.0	23.0	
S 124 Trihalomethanes, Total	1				0		80.0	79.9	
S 125 Total BTEX	1				0		100.0	104.6	
S 128 Xylenes, Total	106				0		40.0	42.7	

Reagents:

vmfasgw_00372	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vmfasaw_00340	Amount Added:	16.00	Units: uL	
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

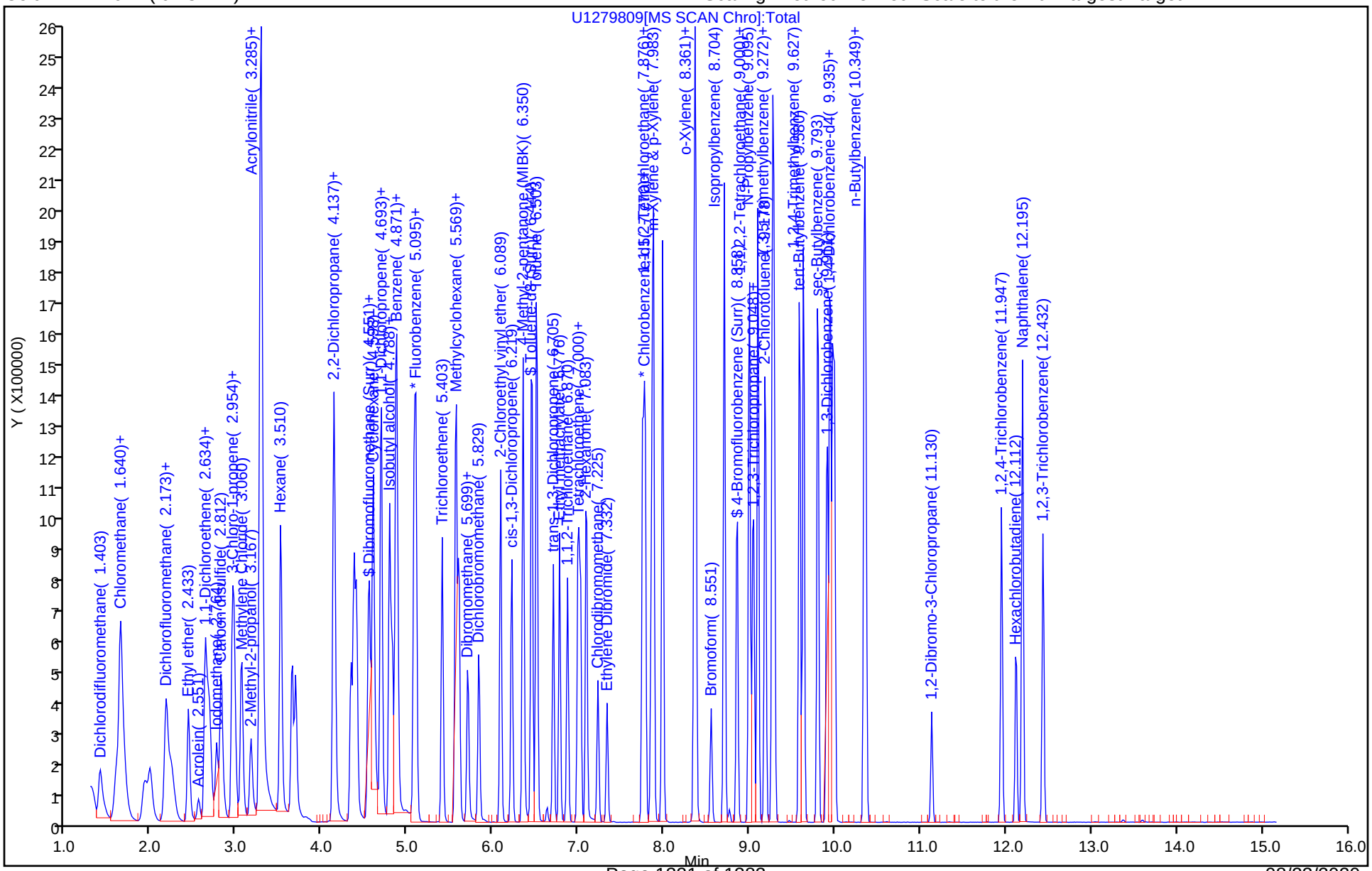
Report Date: 19-Aug-2020 17:28:01 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279809.D

Injection Date:	19-Aug-2020 16:31:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279809.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Aug-2020 16:31:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0101160-005
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 19-Aug-2020 15:09:30 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1007

First Level Reviewer: laveyt Date: 19-Aug-2020 17:27:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	17.7	88.69
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.0	89.94
$ 6 Toluene-d8 (Surr)	20.0	20.1	100.40
$ 7 4-Bromofluorobenzene (Surr)	20.0	21.4	107.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 200-54623-C-4 MS

Matrix: Water Lab File ID: U1916401.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 21:29

Soil Aliquot Vol: Dilution Factor: 20

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	407		20	8.1
71-55-6	1,1,1-Trichloroethane	360		20	4.8
79-34-5	1,1,2,2-Tetrachloroethane	490		20	11
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	406		20	8.2
75-34-3	1,1-Dichloroethane	432		20	8.1
75-35-4	1,1-Dichloroethene	393		20	9.2
563-58-6	1,1-Dichloropropene	414		20	7.4
87-61-6	1,2,3-Trichlorobenzene	348		20	11
96-18-4	1,2,3-Trichloropropane	435		20	10
120-82-1	1,2,4-Trichlorobenzene	309		20	16
95-63-6	1,2,4-Trimethylbenzene	417		20	9.1
96-12-8	1,2-Dibromo-3-Chloropropane	403		100	18
95-50-1	1,2-Dichlorobenzene	410		20	8.6
107-06-2	1,2-Dichloroethane	365		20	8.5
78-87-5	1,2-Dichloropropane	423		20	7.4
541-73-1	1,3-Dichlorobenzene	378		20	8.1
142-28-9	1,3-Dichloropropane	450		20	4.2
106-46-7	1,4-Dichlorobenzene	374		20	7.5
594-20-7	2,2-Dichloropropane	437		20	19
110-75-8	2-Chloroethyl vinyl ether	181	J	200	22
95-49-8	2-Chlorotoluene	414		20	8.5
591-78-6	2-Hexanone	932		100	42
108-86-1	Bromobenzene	371		20	7.6
74-97-5	Bromochloromethane	420		20	10
106-43-4	4-Chlorotoluene	397		20	8.8
99-87-6	p-Isopropyltoluene	384		20	9.8
67-64-1	Acetone	1080		100	110
71-43-2	Benzene	430		20	7.7
75-25-2	Bromoform	363		20	15
74-83-9	Bromomethane	385		20	8.4
75-15-0	Carbon disulfide	396		20	5.6
56-23-5	Carbon tetrachloride	351		20	5.2
108-90-7	Chlorobenzene	411		20	6.4
75-00-3	Chloroethane	436		20	17
67-66-3	Chloroform	406		20	8.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 200-54623-C-4 MS

Matrix: Water Lab File ID: U1916401.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 21:29

Soil Aliquot Vol: Dilution Factor: 20

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	425		20	13
156-59-2	cis-1,2-Dichloroethene	396		20	7.6
10061-01-5	cis-1,3-Dichloropropene	377		20	12
87-68-3	Hexachlorobutadiene	260		20	17
74-95-3	Dibromomethane	319		20	6.6
75-27-4	Bromodichloromethane	367		20	7.0
75-71-8	Dichlorodifluoromethane	352		20	7.0
100-41-4	Ethylbenzene	407		20	7.8
106-93-4	1,2-Dibromoethane	404		20	7.3
91-20-3	Naphthalene	402		20	16
179601-23-1	m-Xylene & p-Xylene	417		40	7.9
104-51-8	n-Butylbenzene	379		20	12
98-82-8	Isopropylbenzene	412		20	9.0
103-65-1	n-Propylbenzene	405		20	9.2
78-93-3	2-Butanone	890		100	48
108-10-1	4-Methyl-2-pentanone	866		100	42
135-98-8	sec-Butylbenzene	392		20	13
1634-04-4	Methyl tert-butyl ether	375		20	8.8
75-09-2	Methylene Chloride	414		100	26
95-47-6	o-Xylene	430		20	8.6
100-42-5	Styrene	418		20	8.0
98-06-6	tert-Butylbenzene	369		20	10
127-18-4	Tetrachloroethene	1080		20	6.5
108-88-3	Toluene	439		20	6.9
156-60-5	trans-1,2-Dichloroethene	412		20	8.7
10061-02-6	trans-1,3-Dichloropropene	390		20	13
79-01-6	Trichloroethene	365		20	7.2
75-69-4	Trichlorofluoromethane	351		20	9.0
108-05-4	Vinyl acetate	435		40	16
75-01-4	Vinyl chloride	438		10	9.9
1330-20-7	Xylenes, Total	847		40	8.5
124-48-1	Dibromochloromethane	390		20	7.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 200-54623-C-4 MS

Matrix: Water Lab File ID: U1916401.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 21:29

Soil Aliquot Vol: Dilution Factor: 20

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		75-130
460-00-4	4-Bromofluorobenzene (Surr)	102		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	96		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916401.d
Lims ID: 200-54623-C-4 MS
Client ID:
Sample Type: MS
Inject. Date: 17-Aug-2020 21:29:58 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 240-0101080-014
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 22:08:06 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 22:08:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.665	5.666	-0.001	99	974131	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.512	8.500	0.012	85	702529	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	93	383576	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	93	253043	1.00	19.3	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	96	281218	1.00	18.7	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	903807	1.00	21.5	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	92	322381	1.00	20.3	
$ 8 BFB	95	4.847	4.703	0.144	0	42571		NR	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	330351	1.00	17.6	
10 Chloromethane	50	1.823	1.823	0.000	99	298742	1.00	21.3	
12 Vinyl chloride	62	1.930	1.918	0.012	97	317860	1.00	21.9	
13 Bromomethane	94	2.250	2.250	0.000	91	218905	1.00	19.2	
15 Chloroethane	64	2.321	2.321	0.000	99	196242	1.00	21.8	
17 Trichlorofluoromethane	101	2.547	2.547	0.000	97	425660	1.00	17.5	
19 Acrolein	56	2.938	2.938	0.000	99	89931	5.00	41.5	
20 1,1-Dichloroethene	61	3.045	3.033	0.012	98	343563	1.00	19.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.068	3.069	-0.001	93	254007	1.00	20.3	
22 Acetone	43	3.092	3.080	0.012	100	206312	2.00	54.0	
24 Iodomethane	142	3.187	3.187	0.000	99	398877	1.00	17.6	
25 Carbon disulfide	76	3.246	3.246	0.000	99	725522	1.00	19.8	
27 3-Chloro-1-propene	41	3.377	3.377	0.000	90	332628	1.00	19.3	
29 Methylene Chloride	49	3.484	3.484	0.000	88	287127	1.00	20.7	
31 Acrylonitrile	53	3.709	3.697	0.012	98	1302032	10.0	265.8	
32 trans-1,2-Dichloroethene	61	3.744	3.744	0.000	75	339414	1.00	20.6	
33 Methyl tert-butyl ether	73	3.744	3.744	0.000	95	633192	1.00	18.7	
35 1,1-Dichloroethane	63	4.124	4.124	0.000	96	426024	1.00	21.6	
36 Vinyl acetate	43	4.159	4.160	-0.001	97	490947	1.00	21.7	
38 2-Chloro-1,3-butadiene	53		4.195					ND	
40 2-Butanone (MEK)	72	4.646	4.634	0.012	96	102320	2.00	44.5	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	81	278520	1.00	19.8	
42 2,2-Dichloropropane	77	4.646	4.646	0.000	79	259661	1.00	21.9	
43 Propionitrile	54		4.681					ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 Methacrylonitrile	41		4.824					ND	
46 Chlorobromomethane	49	4.847	4.847	0.000	91	199193	1.00	21.0	
47 Tetrahydrofuran	42	4.895	4.895	0.000	85	263584	2.00	52.9	
48 Chloroform	83	4.918	4.919	0.000	92	438121	1.00	20.3	
49 1,1,1-Trichloroethane	97	5.096	5.096	0.000	98	366024	1.00	18.0	
52 Carbon tetrachloride	117	5.250	5.239	0.011	97	343610	1.00	17.5	
51 1,1-Dichloropropene	75	5.239	5.239	0.000	97	354700	1.00	20.7	
53 Isobutyl alcohol	41	5.310	5.298	0.012	93	396204	25.0	740.7	
54 Benzene	78	5.428	5.417	0.011	95	995619	1.00	21.5	
55 1,2-Dichloroethane	62	5.428	5.428	0.000	97	319820	1.00	18.2	
59 Trichloroethene	130	5.998	5.998	0.000	98	280743	1.00	18.2	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	96	227232	1.00	21.1	
63 Methyl methacrylate	41		6.270					ND	U
64 Dibromomethane	174	6.306	6.306	0.000	94	176512	1.00	16.0	
65 1,4-Dioxane	88	6.318	6.306	0.012	92	86233	20.0	741.0	
66 Dichlorobromomethane	83	6.436	6.436	0.000	99	311288	1.00	18.4	
68 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	93	77836	1.00	9.03	
69 cis-1,3-Dichloropropene	75	6.851	6.851	0.000	97	354789	1.00	18.8	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	95	675692	2.00	43.3	
71 Toluene	91	7.172	7.172	0.000	99	1042911	1.00	22.0	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	330063	1.00	19.5	
73 Ethyl methacrylate	69	7.444	7.444	0.000	87	326631	1.00	21.4	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	219187	1.00	22.0	
75 Tetrachloroethene	166	7.705	7.705	0.000	98	820986	1.00	54.2	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	86	379286	1.00	22.5	
77 2-Hexanone	43	7.776	7.776	0.000	95	515204	2.00	46.6	
79 Chlorodibromomethane	129	7.930	7.931	-0.001	90	245603	1.00	19.5	
81 Ethylene Dibromide	107	8.049	8.049	0.000	97	237657	1.00	20.2	
83 Chlorobenzene	112	8.535	8.535	0.000	96	667312	1.00	20.5	
84 1,1,1,2-Tetrachloroethane	131	8.606	8.607	-0.001	95	238735	1.00	20.4	
85 Ethylbenzene	106	8.642	8.642	0.000	98	345677	1.00	20.4	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	431476	1.00	20.9	
87 o-Xylene	106	9.152	9.152	0.000	96	422827	1.00	21.5	
88 Styrene	104	9.164	9.164	0.000	93	703241	1.00	20.9	
89 Bromoform	173	9.354	9.354	0.000	97	186894	1.00	18.1	
90 Isopropylbenzene	105	9.531	9.532	-0.001	96	1086667	1.00	20.6	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	93	361972	1.00	24.5	
95 Bromobenzene	156	9.852	9.852	0.000	92	273757	1.00	18.6	
97 trans-1,4-Dichloro-2-butene	53	9.875	9.875	0.000	79	100800	1.00	19.2	
96 1,2,3-Trichloropropane	110	9.875	9.875	0.000	83	121712	1.00	21.7	
98 N-Propylbenzene	120	9.946	9.947	-0.001	99	300022	1.00	20.2	
100 2-Chlorotoluene	126	10.041	10.041	0.000	97	259378	1.00	20.7	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	95	886152	1.00	20.8	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	269047	1.00	19.8	
103 tert-Butylbenzene	119	10.480	10.480	0.000	92	747911	1.00	18.5	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	95	902157	1.00	20.8	
106 sec-Butylbenzene	105	10.705	10.706	-0.001	94	1068535	1.00	19.6	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	511389	1.00	18.9	
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	917502	1.00	19.2	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	523943	1.00	18.7	
112 n-Butylbenzene	91	11.286	11.287	-0.001	98	745290	1.00	19.0	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	504670	1.00	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,2-Dibromo-3-Chloropropane	157	12.128	12.129	-0.001	87	94770	1.00	20.2	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	94	253198	1.00	15.4	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	109550	1.00	13.0	
118 Naphthalene	128	13.279	13.279	0.000	97	910183	1.00	20.1	
119 1,2,3-Trichlorobenzene	180	13.551	13.540	0.011	95	256376	1.00	17.4	
S 126 1,2-Dichloroethene, Total	96				0			40.4	
S 128 Xylenes, Total	106				0		2.00	42.4	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

U - Marked Undetected

Reagents:

vmfasgw_00371	Amount Added:	16.00	Units: uL	
vmfasaw_00340	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

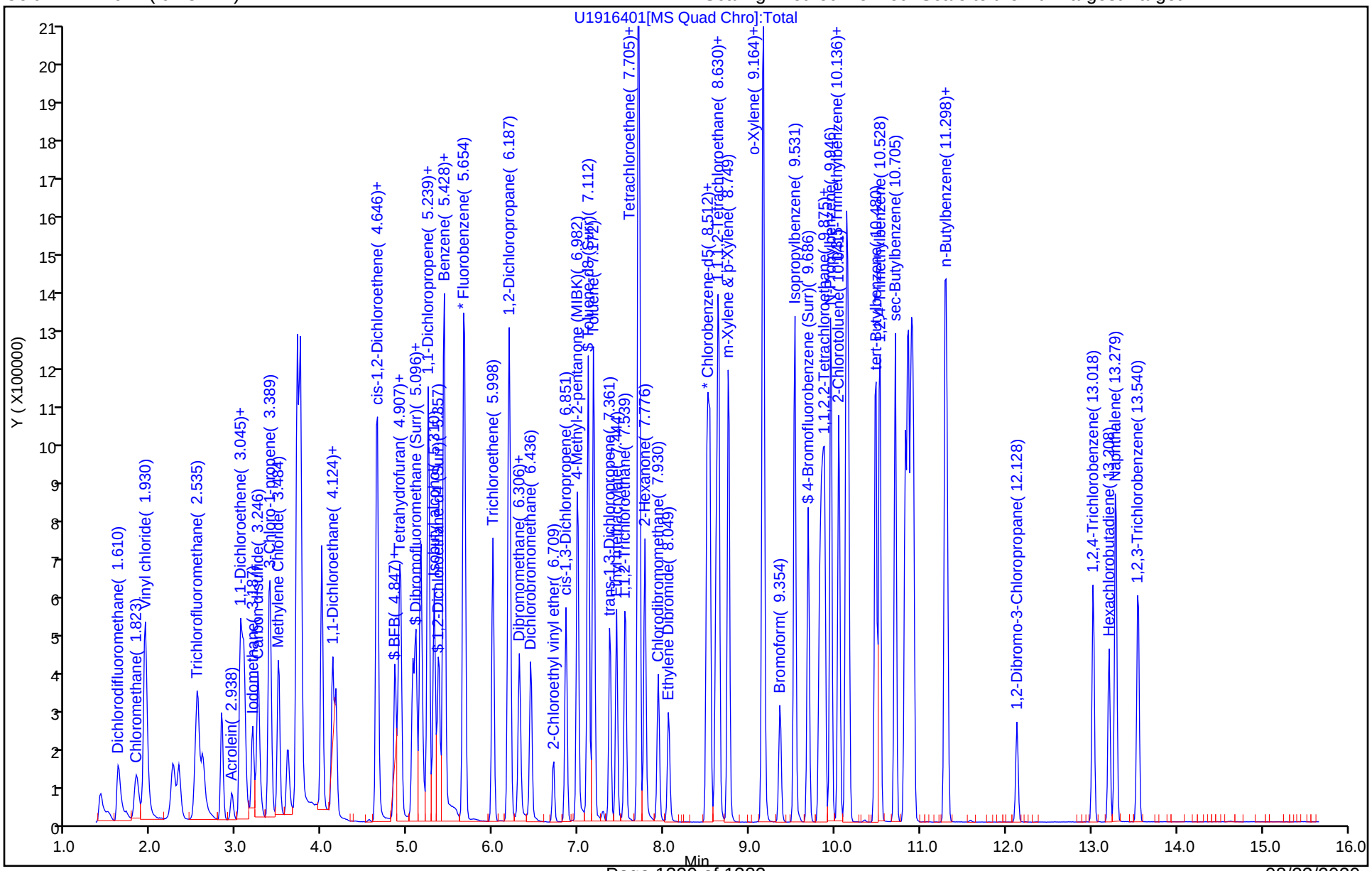
Report Date: 17-Aug-2020 22:08:07 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916401.d

Injection Date:	17-Aug-2020 21:29:58	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	200-54623-C-4 MS			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916401.d
Lims ID: 200-54623-C-4 MS
Client ID:
Sample Type: MS
Inject. Date: 17-Aug-2020 21:29:58 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 240-0101080-014
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 22:08:06 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 22:08:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.3	1929.87
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	1867.33
$ 6 Toluene-d8 (Surr)	20.0	21.5	2145.46
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.3	2033.68

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 240-135021-B-1 MS

Matrix: Water Lab File ID: U1279822a.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 21:22

Soil Aliquot Vol: Dilution Factor: 125

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	2490		130	30
79-34-5	1,1,2,2-Tetrachloroethane	2720		130	70
75-34-3	1,1-Dichloroethane	2690		130	51
75-35-4	1,1-Dichloroethene	2710		130	58
95-50-1	1,2-Dichlorobenzene	2570		130	54
107-06-2	1,2-Dichloroethane	2310		130	53
541-73-1	1,3-Dichlorobenzene	2580		130	51
106-46-7	1,4-Dichlorobenzene	2500		130	47
67-64-1	Acetone	5600		630	680
71-43-2	Benzene	2440		130	48
75-15-0	Carbon disulfide	2700		130	35
75-00-3	Chloroethane	2470		130	100
67-66-3	Chloroform	2350		130	51
156-59-2	cis-1,2-Dichloroethene	4410		130	48
100-41-4	Ethylbenzene	2680		130	49
179601-23-1	m-Xylene & p-Xylene	2700		250	49
75-09-2	Methylene Chloride	2810		630	160
95-47-6	o-Xylene	2610		130	54
127-18-4	Tetrachloroethene	6660		130	41
108-88-3	Toluene	2500		130	43
156-60-5	trans-1,2-Dichloroethene	2830		130	54
79-01-6	Trichloroethene	2910		130	45
75-01-4	Vinyl chloride	2950		63	62
1330-20-7	Xylenes, Total	5310		250	53

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		75-130
460-00-4	4-Bromofluorobenzene (Surr)	109		47-134
2037-26-5	Toluene-d8 (Surr)	103		69-122
1868-53-7	Dibromofluoromethane (Surr)	92		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279822a.D
Lims ID: 240-135021-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Aug-2020 21:22:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 125.0000
Sample Info: 240-0101160-018
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 12:53:49 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 14:54:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	941545	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	87	635001	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	95	323387	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	229971	20.0	18.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.823	4.811	0.012	96	281473	20.0	18.4	
$ 6 Toluene-d8 (Surr)	98	6.456	6.444	0.012	93	881745	20.0	20.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	93	319459	20.0	21.7	
12 Vinyl chloride	62	1.675	1.676	-0.001	97	415893	20.0	23.6	
15 Chloroethane	64	1.983	1.983	0.000	99	253520	20.0	19.8	
21 1,1-Dichloroethene	61	2.622	2.622	0.000	96	410491	20.0	21.7	
23 Acetone	43	2.681	2.681	0.000	100	268476	40.0	44.8	
25 Carbon disulfide	76	2.811	2.812	-0.001	99	823399	20.0	21.6	
29 Methylene Chloride	49	3.048	3.048	0.000	96	388455	20.0	22.5	
32 trans-1,2-Dichloroethene	61	3.285	3.285	-0.001	69	411454	20.0	22.6	
35 1,1-Dichloroethane	63	3.640	3.640	0.000	96	520402	20.0	21.5	
41 cis-1,2-Dichloroethene	96	4.136	4.137	-0.001	81	597614	20.0	35.3	
48 Chloroform	83	4.397	4.397	0.000	94	451134	20.0	18.8	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	379308	20.0	20.0	
54 Benzene	78	4.858	4.859	-0.001	96	1129018	20.0	19.5	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	96	346883	20.0	18.5	
59 Trichloroethene	130	5.403	5.403	0.000	97	303926	20.0	23.3	
71 Toluene	91	6.503	6.503	0.000	99	1052959	20.0	20.0	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	203433	20.0	19.7	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	671989	20.0	53.3	
85 Ethylbenzene	106	7.876	7.876	0.000	99	362312	20.0	21.4	
86 m-Xylene & p-Xylene	106	7.982	7.982	0.000	99	453030	20.0	21.6	
87 o-Xylene	106	8.361	8.361	0.000	97	450842	20.0	20.9	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	351841	20.0	21.8	
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	495364	20.0	20.7	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	95	496493	20.0	20.0	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	489658	20.0	20.6	
S 128 Xylenes, Total	106				0		40.0	42.5	

Reagents:

vmfasgw_00372	Amount Added:	16.00	Units: uL	
vmfasaw_00340	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

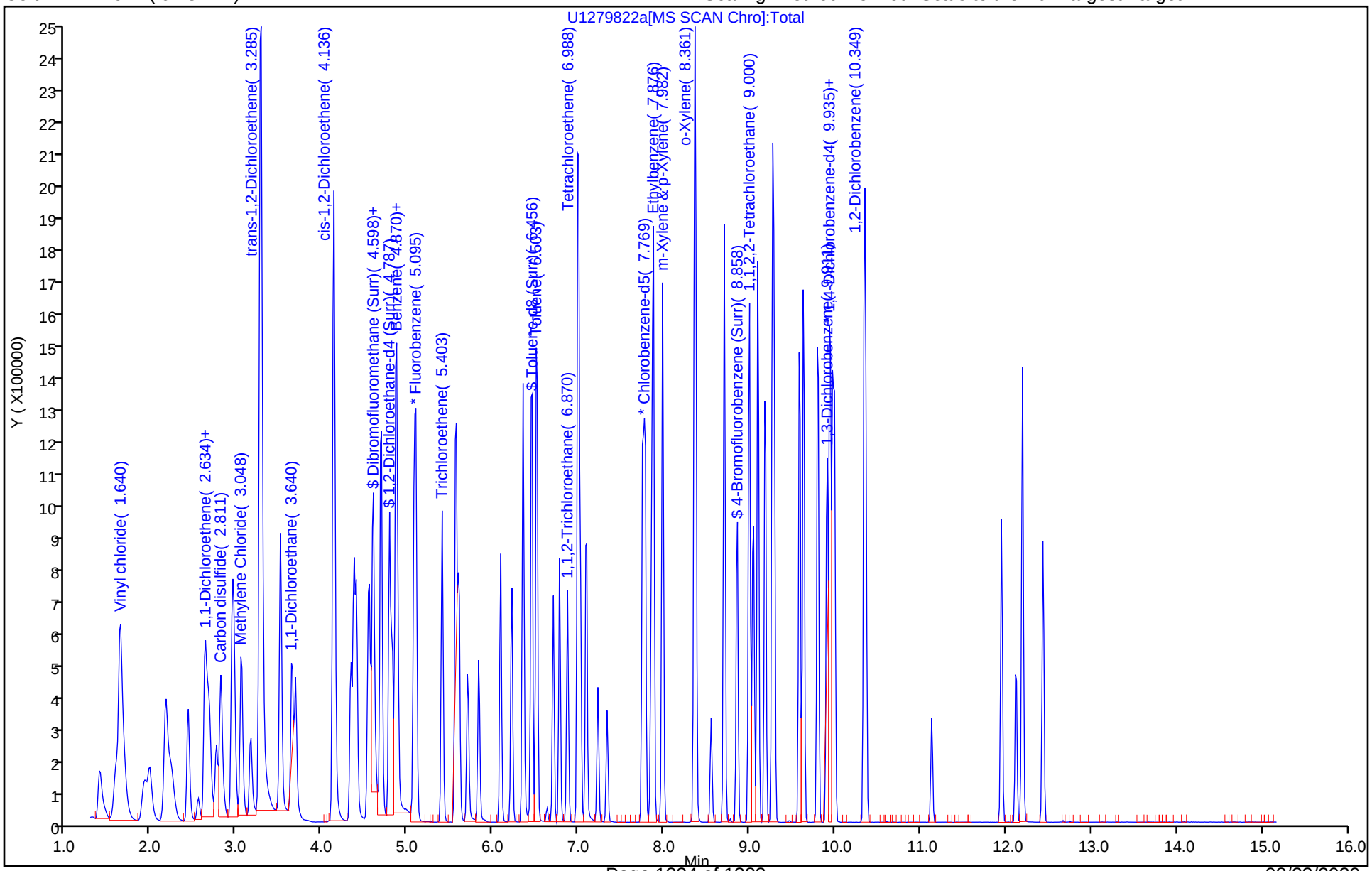
Report Date: 20-Aug-2020 14:54:23 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279822a.D

Injection Date:	19-Aug-2020 21:22:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	240-135021-B-1 MS			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	125.0000	ALS Bottle#:	17
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279822a.D
Lims ID: 240-135021-B-1 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Aug-2020 21:22:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 125.0000
Sample Info: 240-0101160-018
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 12:53:49 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 14:54:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.4	92.01
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	92.01
$ 6 Toluene-d8 (Surr)	20.0	20.5	102.65
$ 7 4-Bromofluorobenzene (Surr)	20.0	21.7	108.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 200-54623-C-4 MSD

Matrix: Water Lab File ID: U1916402.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 21:52

Soil Aliquot Vol: Dilution Factor: 20

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	405		20	8.1
71-55-6	1,1,1-Trichloroethane	363		20	4.8
79-34-5	1,1,2,2-Tetrachloroethane	485		20	11
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	389		20	8.2
75-34-3	1,1-Dichloroethane	422		20	8.1
75-35-4	1,1-Dichloroethene	381		20	9.2
563-58-6	1,1-Dichloropropene	404		20	7.4
87-61-6	1,2,3-Trichlorobenzene	359		20	11
96-18-4	1,2,3-Trichloropropane	432		20	10
120-82-1	1,2,4-Trichlorobenzene	322		20	16
95-63-6	1,2,4-Trimethylbenzene	416		20	9.1
96-12-8	1,2-Dibromo-3-Chloropropane	415		100	18
95-50-1	1,2-Dichlorobenzene	410		20	8.6
107-06-2	1,2-Dichloroethane	366		20	8.5
78-87-5	1,2-Dichloropropane	430		20	7.4
541-73-1	1,3-Dichlorobenzene	383		20	8.1
142-28-9	1,3-Dichloropropane	443		20	4.2
106-46-7	1,4-Dichlorobenzene	377		20	7.5
594-20-7	2,2-Dichloropropane	444		20	19
110-75-8	2-Chloroethyl vinyl ether	150	J	200	22
95-49-8	2-Chlorotoluene	418		20	8.5
591-78-6	2-Hexanone	957		100	42
108-86-1	Bromobenzene	371		20	7.6
74-97-5	Bromochloromethane	418		20	10
106-43-4	4-Chlorotoluene	401		20	8.8
99-87-6	p-Isopropyltoluene	385		20	9.8
67-64-1	Acetone	1150		100	110
71-43-2	Benzene	431		20	7.7
75-25-2	Bromoform	351		20	15
74-83-9	Bromomethane	380		20	8.4
75-15-0	Carbon disulfide	388		20	5.6
56-23-5	Carbon tetrachloride	354		20	5.2
108-90-7	Chlorobenzene	404		20	6.4
75-00-3	Chloroethane	424		20	17
67-66-3	Chloroform	402		20	8.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 200-54623-C-4 MSD

Matrix: Water Lab File ID: U1916402.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 21:52

Soil Aliquot Vol: Dilution Factor: 20

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	404		20	13
156-59-2	cis-1,2-Dichloroethene	388		20	7.6
10061-01-5	cis-1,3-Dichloropropene	377		20	12
87-68-3	Hexachlorobutadiene	271		20	17
74-95-3	Dibromomethane	324		20	6.6
75-27-4	Bromodichloromethane	370		20	7.0
75-71-8	Dichlorodifluoromethane	329		20	7.0
100-41-4	Ethylbenzene	410		20	7.8
106-93-4	1,2-Dibromoethane	399		20	7.3
91-20-3	Naphthalene	412		20	16
179601-23-1	m-Xylene & p-Xylene	417		40	7.9
104-51-8	n-Butylbenzene	387		20	12
98-82-8	Isopropylbenzene	410		20	9.0
103-65-1	n-Propylbenzene	409		20	9.2
78-93-3	2-Butanone	968		100	48
108-10-1	4-Methyl-2-pentanone	883		100	42
135-98-8	sec-Butylbenzene	395		20	13
1634-04-4	Methyl tert-butyl ether	395		20	8.8
75-09-2	Methylene Chloride	411		100	26
95-47-6	o-Xylene	429		20	8.6
100-42-5	Styrene	418		20	8.0
98-06-6	tert-Butylbenzene	369		20	10
127-18-4	Tetrachloroethene	1060		20	6.5
108-88-3	Toluene	431		20	6.9
156-60-5	trans-1,2-Dichloroethene	409		20	8.7
10061-02-6	trans-1,3-Dichloropropene	386		20	13
79-01-6	Trichloroethene	363		20	7.2
75-69-4	Trichlorofluoromethane	331		20	9.0
108-05-4	Vinyl acetate	438		40	16
75-01-4	Vinyl chloride	419		10	9.9
1330-20-7	Xylenes, Total	846		40	8.5
124-48-1	Dibromochloromethane	386		20	7.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 200-54623-C-4 MSD

Matrix: Water Lab File ID: U1916402.d

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/17/2020 21:52

Soil Aliquot Vol: Dilution Factor: 20

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447506 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		75-130
460-00-4	4-Bromofluorobenzene (Surr)	102		47-134
2037-26-5	Toluene-d8 (Surr)	107		69-122
1868-53-7	Dibromofluoromethane (Surr)	96		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916402.d
Lims ID: 200-54623-C-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-Aug-2020 21:52:12 ALS Bottle#: 0 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 240-0101080-015
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 22:13:30 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 22:13:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.666	5.666	0.000	99	992250	20.0	20.0	
* 2 Chlorobenzene-d5	117	8.500	8.500	0.000	86	726145	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.895	10.895	0.000	93	395313	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	5.061	5.061	0.000	93	256728	1.00	19.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	5.357	5.357	0.000	98	288216	1.00	18.8	
$ 6 Toluene-d8 (Surr)	98	7.112	7.112	0.000	93	927923	1.00	21.3	
$ 7 4-Bromofluorobenzene (Surr)	95	9.686	9.686	0.000	91	332654	1.00	20.3	
$ 8 BFB	95	4.847	4.703	0.144	0	43232		NR	
9 Dichlorodifluoromethane	85	1.610	1.610	0.000	99	314397	1.00	16.5	
10 Chloromethane	50	1.823	1.823	0.000	98	288876	1.00	20.2	
12 Vinyl chloride	62	1.918	1.918	0.000	96	309865	1.00	21.0	
13 Bromomethane	94	2.250	2.250	0.000	91	220317	1.00	19.0	
15 Chloroethane	64	2.310	2.321	-0.011	100	194452	1.00	21.2	
17 Trichlorofluoromethane	101	2.547	2.547	0.000	98	409610	1.00	16.6	
19 Acrolein	56	2.938	2.938	0.000	99	101335	5.00	45.9	
20 1,1-Dichloroethene	61	3.033	3.033	0.000	98	339569	1.00	19.1	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.069	3.069	0.000	94	247623	1.00	19.4	
22 Acetone	43	3.080	3.080	0.000	100	223584	2.00	57.5	
24 Iodomethane	142	3.175	3.187	-0.012	99	406474	1.00	17.6	
25 Carbon disulfide	76	3.246	3.246	0.000	99	723654	1.00	19.4	
27 3-Chloro-1-propene	41	3.377	3.377	0.000	90	330445	1.00	18.8	
29 Methylene Chloride	49	3.484	3.484	0.000	89	290535	1.00	20.6	
31 Acrylonitrile	53	3.697	3.697	0.000	99	1348272	10.0	270.2	
32 trans-1,2-Dichloroethene	61	3.745	3.744	0.001	72	343380	1.00	20.4	
33 Methyl tert-butyl ether	73	3.745	3.744	0.001	94	680092	1.00	19.8	
35 1,1-Dichloroethane	63	4.112	4.124	-0.012	96	423942	1.00	21.1	
36 Vinyl acetate	43	4.160	4.160	0.000	97	503783	1.00	21.9	
38 2-Chloro-1,3-butadiene	53		4.195					ND	
40 2-Butanone (MEK)	72	4.634	4.634	0.000	97	113442	2.00	48.4	
41 cis-1,2-Dichloroethene	96	4.634	4.634	0.000	81	278398	1.00	19.4	
42 2,2-Dichloropropane	77	4.646	4.646	0.000	74	268383	1.00	22.2	
43 Propionitrile	54		4.681					ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 Methacrylonitrile	41		4.824					ND	
46 Chlorobromomethane	49	4.847	4.847	0.000	90	201603	1.00	20.9	
47 Tetrahydrofuran	42	4.895	4.895	0.000	84	277997	2.00	54.9	
48 Chloroform	83	4.919	4.919	0.001	93	441752	1.00	20.1	
49 1,1,1-Trichloroethane	97	5.096	5.096	0.000	98	375469	1.00	18.1	
52 Carbon tetrachloride	117	5.239	5.239	0.000	96	353103	1.00	17.7	
51 1,1-Dichloropropene	75	5.239	5.239	0.000	97	352497	1.00	20.2	
53 Isobutyl alcohol	41	5.310	5.298	0.012	93	379805	25.0	697.1	
54 Benzene	78	5.417	5.417	0.000	95	1017917	1.00	21.6	
55 1,2-Dichloroethane	62	5.428	5.428	0.000	98	327132	1.00	18.3	
59 Trichloroethene	130	5.998	5.998	0.000	97	284619	1.00	18.2	
62 1,2-Dichloropropane	63	6.199	6.199	0.000	96	235364	1.00	21.5	
63 Methyl methacrylate	41		6.270					ND	U
64 Dibromomethane	174	6.306	6.306	0.000	93	182249	1.00	16.2	
65 1,4-Dioxane	88	6.318	6.306	0.012	93	90199	20.0	760.9	
66 Dichlorobromomethane	83	6.436	6.436	0.000	99	319222	1.00	18.5	
68 2-Chloroethyl vinyl ether	63	6.709	6.709	0.000	92	65678	1.00	7.48	
69 cis-1,3-Dichloropropene	75	6.851	6.851	0.000	97	361717	1.00	18.9	
70 4-Methyl-2-pentanone (MIBK)	43	6.982	6.982	0.000	95	701443	2.00	44.1	
71 Toluene	91	7.172	7.172	0.000	98	1058054	1.00	21.6	
72 trans-1,3-Dichloropropene	75	7.361	7.361	0.000	92	337291	1.00	19.3	
73 Ethyl methacrylate	69	7.444	7.444	0.000	87	337762	1.00	21.4	
74 1,1,2-Trichloroethane	97	7.539	7.539	0.000	91	224650	1.00	21.8	
75 Tetrachloroethene	166	7.705	7.705	0.000	99	831424	1.00	53.1	
76 1,3-Dichloropropane	76	7.705	7.705	0.000	87	385889	1.00	22.1	
77 2-Hexanone	43	7.776	7.776	0.000	95	547016	2.00	47.8	
79 Chlorodibromomethane	129	7.931	7.931	0.000	90	251242	1.00	19.3	
81 Ethylene Dibromide	107	8.049	8.049	0.000	98	242191	1.00	19.9	
83 Chlorobenzene	112	8.535	8.535	0.000	97	678911	1.00	20.2	
84 1,1,1,2-Tetrachloroethane	131	8.607	8.607	0.000	95	245225	1.00	20.2	
85 Ethylbenzene	106	8.642	8.642	0.000	98	359547	1.00	20.5	
86 m-Xylene & p-Xylene	106	8.749	8.749	0.000	99	445842	1.00	20.8	
87 o-Xylene	106	9.152	9.152	0.000	96	435761	1.00	21.4	
88 Styrene	104	9.164	9.164	0.000	94	728091	1.00	20.9	
89 Bromoform	173	9.354	9.354	0.000	97	186761	1.00	17.5	
90 Isopropylbenzene	105	9.532	9.532	0.000	96	1119166	1.00	20.5	
93 1,1,2,2-Tetrachloroethane	83	9.816	9.816	0.000	95	369295	1.00	24.2	
95 Bromobenzene	156	9.852	9.852	0.000	91	281890	1.00	18.5	
97 trans-1,4-Dichloro-2-butene	53	9.875	9.875	0.000	82	105961	1.00	19.6	
96 1,2,3-Trichloropropane	110	9.875	9.875	0.000	86	124560	1.00	21.6	
98 N-Propylbenzene	120	9.947	9.947	0.000	99	312270	1.00	20.4	
100 2-Chlorotoluene	126	10.041	10.041	0.000	97	270283	1.00	20.9	
101 1,3,5-Trimethylbenzene	105	10.136	10.136	0.000	95	919906	1.00	20.9	
102 4-Chlorotoluene	126	10.160	10.160	0.000	99	280181	1.00	20.0	
103 tert-Butylbenzene	119	10.480	10.480	0.000	92	770759	1.00	18.5	
105 1,2,4-Trimethylbenzene	105	10.528	10.528	0.000	96	927345	1.00	20.8	
106 sec-Butylbenzene	105	10.706	10.706	0.000	94	1109346	1.00	19.7	
107 1,3-Dichlorobenzene	146	10.824	10.824	0.000	98	534354	1.00	19.1	
108 4-Isopropyltoluene	119	10.860	10.860	0.000	97	947807	1.00	19.2	
109 1,4-Dichlorobenzene	146	10.919	10.919	0.000	95	543048	1.00	18.8	
112 n-Butylbenzene	91	11.287	11.287	0.000	98	783990	1.00	19.4	
113 1,2-Dichlorobenzene	146	11.310	11.310	0.000	98	519591	1.00	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
114 1,2-Dibromo-3-Chloropropane	157	12.129	12.129	0.000	88	100411	1.00	20.7	
116 1,2,4-Trichlorobenzene	180	13.018	13.018	0.000	94	272012	1.00	16.1	
117 Hexachlorobutadiene	225	13.208	13.208	0.000	97	117758	1.00	13.6	
118 Naphthalene	128	13.291	13.279	0.012	97	962469	1.00	20.6	
119 1,2,3-Trichlorobenzene	180	13.540	13.540	0.000	95	272423	1.00	18.0	
S 126 1,2-Dichloroethene, Total	96				0			39.8	
S 128 Xylenes, Total	106				0		2.00	42.3	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

U - Marked Undetected

Reagents:

vmfasgw_00371	Amount Added:	16.00	Units: uL	
vmfasaw_00340	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00007	Amount Added:	2.00	Units: uL	Run Reagent

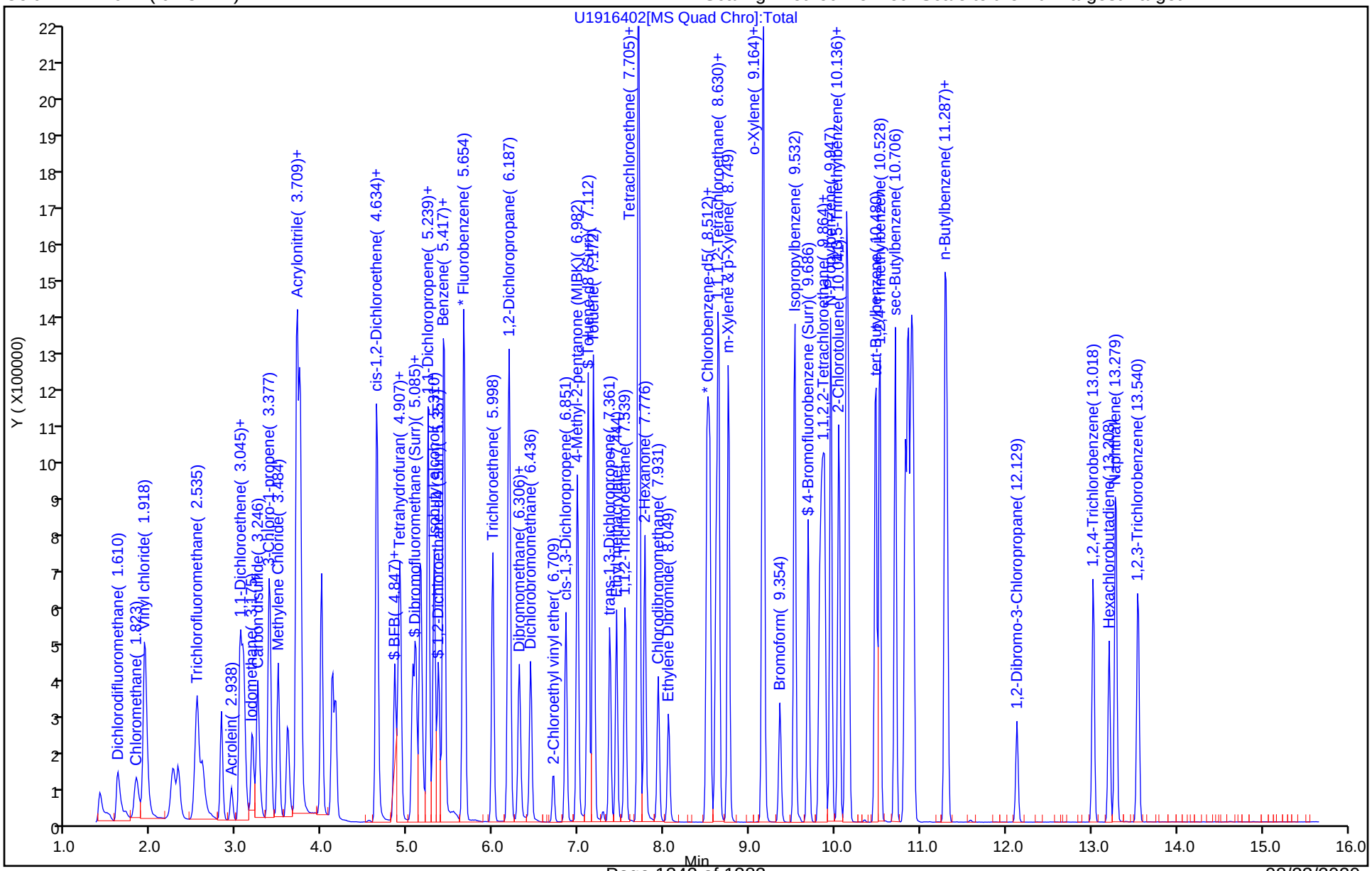
Report Date: 17-Aug-2020 22:13:31 Chrom Revision: 2.3 30-Jun-2020 12:05:54

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916402.d

Injection Date:	17-Aug-2020 21:52:12	Instrument ID:	A3UX19	Operator ID:	001904
Lims ID:	200-54623-C-4 MSD			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	0
Method:	8260_19	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\U1916402.d
Lims ID: 200-54623-C-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-Aug-2020 21:52:12 ALS Bottle#: 0 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 20.0000
Sample Info: 240-0101080-015
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromfs\Canton\ChromData\A3UX19\20200817-101080.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 17-Aug-2020 22:13:30 Calib Date: 09-Jun-2020 21:22:13
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX19\20200609-98977.b\U1914735.d

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1048

First Level Reviewer: laveyt Date: 17-Aug-2020 22:13:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	19.2	1922.22
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	1878.85
$ 6 Toluene-d8 (Surr)	20.0	21.3	2131.07
$ 7 4-Bromofluorobenzene (Surr)	20.0	20.3	2030.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Client Sample ID: Lab Sample ID: 240-135021-B-1 MSD

Matrix: Water Lab File ID: U1279823a.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/19/2020 21:45

Soil Aliquot Vol: Dilution Factor: 125

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 447867 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	2480		130	30
79-34-5	1,1,2,2-Tetrachloroethane	2660		130	70
75-34-3	1,1-Dichloroethane	2660		130	51
75-35-4	1,1-Dichloroethene	2720		130	58
95-50-1	1,2-Dichlorobenzene	2570		130	54
107-06-2	1,2-Dichloroethane	2310		130	53
541-73-1	1,3-Dichlorobenzene	2580		130	51
106-46-7	1,4-Dichlorobenzene	2490		130	47
67-64-1	Acetone	5840		630	680
71-43-2	Benzene	2460		130	48
75-15-0	Carbon disulfide	2700		130	35
75-00-3	Chloroethane	2450		130	100
67-66-3	Chloroform	2350		130	51
156-59-2	cis-1,2-Dichloroethene	4480		130	48
100-41-4	Ethylbenzene	2660		130	49
179601-23-1	m-Xylene & p-Xylene	2720		250	49
75-09-2	Methylene Chloride	2790		630	160
95-47-6	o-Xylene	2620		130	54
127-18-4	Tetrachloroethene	6770		130	41
108-88-3	Toluene	2490		130	43
156-60-5	trans-1,2-Dichloroethene	2810		130	54
79-01-6	Trichloroethene	2970		130	45
75-01-4	Vinyl chloride	2890		63	62
1330-20-7	Xylenes, Total	5340		250	53

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		75-130
460-00-4	4-Bromofluorobenzene (Surr)	110		47-134
2037-26-5	Toluene-d8 (Surr)	105		69-122
1868-53-7	Dibromofluoromethane (Surr)	93		78-129

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279823a.D
Lims ID: 240-135021-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Aug-2020 21:45:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 125.0000
Sample Info: 240-0101160-019
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 12:53:49 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 14:54:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.095	5.095	0.000	99	949078	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.746	7.746	0.000	86	642472	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.970	9.970	0.000	94	333892	20.0	20.0	
$ 4 Dibromofluoromethane (Surr)	111	4.539	4.539	0.000	94	234677	20.0	18.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.811	4.811	0.000	96	289628	20.0	18.8	
$ 6 Toluene-d8 (Surr)	98	6.444	6.444	0.000	93	909628	20.0	20.9	
$ 7 4-Bromofluorobenzene (Surr)	95	8.858	8.858	0.000	95	328517	20.0	22.1	
12 Vinyl chloride	62	1.676	1.676	0.000	97	410727	20.0	23.1	
15 Chloroethane	64	1.983	1.983	0.000	100	253795	20.0	19.6	
21 1,1-Dichloroethene	61	2.622	2.622	0.000	96	414559	20.0	21.7	
23 Acetone	43	2.681	2.681	0.000	100	282067	40.0	46.7	
25 Carbon disulfide	76	2.812	2.812	0.000	99	830073	20.0	21.6	
29 Methylene Chloride	49	3.048	3.048	0.000	96	389127	20.0	22.3	
32 trans-1,2-Dichloroethene	61	3.285	3.285	0.000	69	412214	20.0	22.5	
35 1,1-Dichloroethane	63	3.640	3.640	0.000	96	519141	20.0	21.3	
41 cis-1,2-Dichloroethene	96	4.137	4.137	0.000	81	612756	20.0	35.9	
48 Chloroform	83	4.397	4.397	0.000	94	454886	20.0	18.8	
49 1,1,1-Trichloroethane	97	4.551	4.551	0.000	99	380614	20.0	19.9	
54 Benzene	78	4.859	4.859	0.000	96	1144666	20.0	19.6	
55 1,2-Dichloroethane	62	4.882	4.882	0.000	96	350073	20.0	18.5	
59 Trichloroethene	130	5.403	5.403	0.000	97	312526	20.0	23.7	
71 Toluene	91	6.503	6.503	0.000	99	1061531	20.0	19.9	
75 1,1,2-Trichloroethane	97	6.870	6.870	0.000	92	206217	20.0	19.8	
76 Tetrachloroethene	166	7.000	7.000	0.000	97	690650	20.0	54.1	
85 Ethylbenzene	106	7.876	7.876	0.000	99	364833	20.0	21.3	
86 m-Xylene & p-Xylene	106	7.983	7.982	0.000	99	461090	20.0	21.8	
87 o-Xylene	106	8.361	8.361	0.000	97	456809	20.0	20.9	
93 1,1,2,2-Tetrachloroethane	83	9.000	9.000	0.000	84	355430	20.0	21.3	
106 1,3-Dichlorobenzene	146	9.911	9.911	0.000	98	511837	20.0	20.7	
108 1,4-Dichlorobenzene	146	9.994	9.994	0.000	96	510867	20.0	19.9	
112 1,2-Dichlorobenzene	146	10.361	10.361	0.000	98	506369	20.0	20.6	
S 128 Xylenes, Total	106				0		40.0	42.7	

Reagents:

vmfasgw_00372	Amount Added:	16.00	Units: uL	
vmfasaw_00340	Amount Added:	16.00	Units: uL	
vmfaspw_00362	Amount Added:	16.00	Units: uL	
vmDist_H2o_00178	Amount Added:	0.00	Units:	Run Reagent
vm50ss_stk_00085	Amount Added:	2.00	Units: uL	Run Reagent
vm50is_stk_a_00007	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00015	Amount Added:	0.00	Units:	Run Reagent

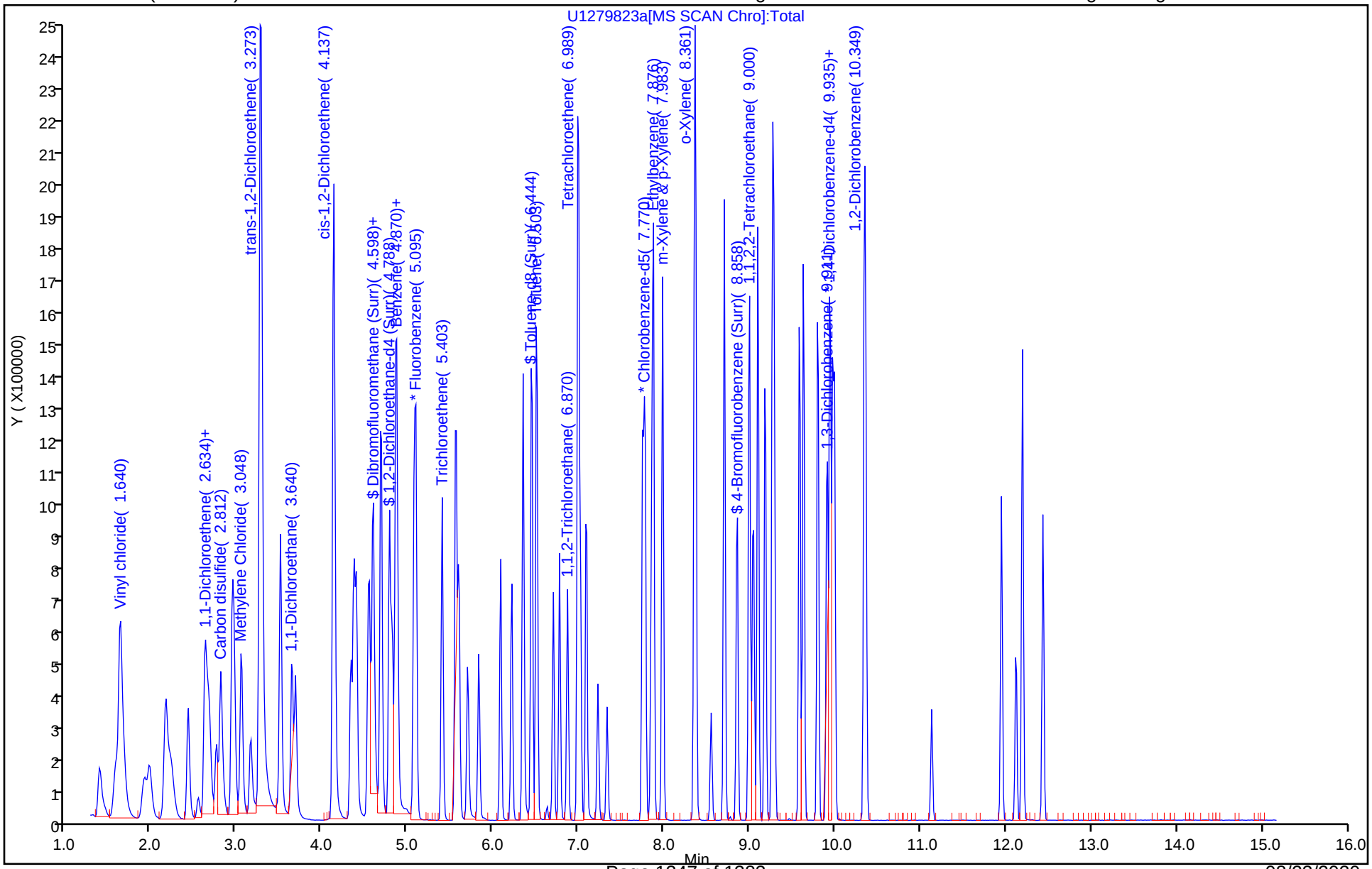
Report Date: 20-Aug-2020 14:54:51 Chrom Revision: 2.3 17-Aug-2020 20:42:08

Eurofins TestAmerica, Canton

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279823a.D

Injection Date:	19-Aug-2020 21:45:30	Instrument ID:	A3UX12	Operator ID:	001904
Lims ID:	240-135021-B-1 MSD			Worklist Smp#:	19
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	125.0000	ALS Bottle#:	18
Method:	8260_12_h2o	Limit Group:	MSV 8260C ICAL		

Column: DB-624 (0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\U1279823a.D
Lims ID: 240-135021-B-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Aug-2020 21:45:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 125.0000
Sample Info: 240-0101160-019
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromfs\Canton\ChromData\A3UX12\20200819-101160.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 20-Aug-2020 12:53:49 Calib Date: 16-Jul-2020 20:20:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Canton\ChromData\A3UX12\20200716-100113.b\U1279120.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1043

First Level Reviewer: laveyt Date: 20-Aug-2020 14:54:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	18.6	93.15
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	93.93
$ 6 Toluene-d8 (Surr)	20.0	20.9	104.66
$ 7 4-Bromofluorobenzene (Surr)	20.0	22.1	110.40

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 07/24/2018 17:22

Analysis Batch Number: 337766 End Date: 07/24/2018 21:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-337766/1		07/24/2018 17:22	1	bfb036.d	DB-624 0.18(mm)
STD8260 240-337766/2 IC		07/24/2018 17:50	1	U1900783.d	DB-624 0.18(mm)
STD8260 240-337766/3 IC		07/24/2018 18:13	1	U1900784.d	DB-624 0.18(mm)
STD8260 240-337766/9 IC		07/24/2018 18:35	1	U1900790.d	DB-624 0.18(mm)
ICIS 240-337766/10		07/24/2018 18:57	1	U1900791.d	DB-624 0.18(mm)
STD8260 240-337766/11 IC		07/24/2018 19:20	1	U1900792.d	DB-624 0.18(mm)
STD8260 240-337766/12 IC		07/24/2018 19:42	1	U1900793.d	DB-624 0.18(mm)
STD8260 240-337766/13 IC		07/24/2018 20:04	1	U1900794.d	DB-624 0.18(mm)
ICV 240-337766/14		07/24/2018 20:26	1		DB-624 0.18(mm)
MRL 240-337766/15 MDLV		07/24/2018 20:48	1		DB-624 0.18(mm)
MDLV 240-337766/16		07/24/2018 21:10	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 07/25/2018 11:28

Analysis Batch Number: 337917 End Date: 07/25/2018 19:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-337917/1		07/25/2018 11:28	1	bfb037.d	DB-624 0.18(mm)
CCVIS 240-337917/3		07/25/2018 12:17	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 12:39	1		DB-624 0.18(mm)
STDA9 240-337917/8 IC		07/25/2018 13:24	1	U1900802.d	DB-624 0.18(mm)
STDA9 240-337917/9 IC		07/25/2018 13:46	1	U1900803.d	DB-624 0.18(mm)
STDA9 240-337917/10 IC		07/25/2018 14:08	1	U1900804.d	DB-624 0.18(mm)
STDA9 240-337917/11 IC		07/25/2018 14:30	1	U1900805.d	DB-624 0.18(mm)
STDA9 240-337917/12 IC		07/25/2018 14:52	1	U1900806.d	DB-624 0.18(mm)
STDA9 240-337917/13 IC		07/25/2018 15:15	1	U1900807.d	DB-624 0.18(mm)
ICV 240-337917/14		07/25/2018 15:37	1	U1900808.d	DB-624 0.18(mm)
MRL 240-337917/15 MDLV		07/25/2018 15:59	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 16:21	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 16:44	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 17:06	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 17:29	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 17:51	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 18:13	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 18:35	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 18:57	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 19:20	1		DB-624 0.18(mm)
ZZZZZ		07/25/2018 19:42	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/27/2018 16:23

Analysis Batch Number: 342719 End Date: 08/27/2018 20:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-342719/1		08/27/2018 16:23	1	bfb058.d	DB-624 0.18(mm)
CCV 240-342719/2		08/27/2018 16:46	1		DB-624 0.18(mm)
STD8260 240-342719/7 IC		08/27/2018 17:09	1	U1901323.d	DB-624 0.18(mm)
STD8260 240-342719/8 IC		08/27/2018 17:31	1	U1901324.d	DB-624 0.18(mm)
STD8260 240-342719/9 IC		08/27/2018 17:53	1	U1901325.d	DB-624 0.18(mm)
ICIS 240-342719/10		08/27/2018 18:16	1	U1901326.d	DB-624 0.18(mm)
STD8260 240-342719/11 IC		08/27/2018 18:38	1	U1901327.d	DB-624 0.18(mm)
STD8260 240-342719/12 IC		08/27/2018 19:01	1	U1901328.d	DB-624 0.18(mm)
STD8260 240-342719/13 IC		08/27/2018 19:23	1	U1901329.d	DB-624 0.18(mm)
ICV 240-342719/14		08/27/2018 19:45	1	U1901330.d	DB-624 0.18(mm)
MRL 240-342719/15 MDLV		08/27/2018 20:07	1		DB-624 0.18(mm)
MDLV 240-342719/16		08/27/2018 20:30	1		DB-624 0.18(mm)
ZZZZZ		08/27/2018 20:52	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Start Date: 04/30/2019 13:47

Analysis Batch Number: 378870 End Date: 04/30/2019 21:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-378870/1		04/30/2019 13:47	1	BFB4108.D	DB-624 0.18(mm)
STD8260 240-378870/8 IC		04/30/2019 14:10	1	U1269795.D	DB-624 0.18(mm)
STD8260 240-378870/9 IC		04/30/2019 14:33	1	U1269796.D	DB-624 0.18(mm)
STD8260 240-378870/10 IC		04/30/2019 14:55	1	U1269797.D	DB-624 0.18(mm)
ICIS 240-378870/11		04/30/2019 15:17	1	U1269798.D	DB-624 0.18(mm)
STD8260 240-378870/12 IC		04/30/2019 15:39	1	U1269799.D	DB-624 0.18(mm)
STD8260 240-378870/13 IC		04/30/2019 16:02	1	U1269800.D	DB-624 0.18(mm)
STD8260 240-378870/14 IC		04/30/2019 16:24	1	U1269801.D	DB-624 0.18(mm)
ICV 240-378870/15		04/30/2019 16:46	1	U1269802.D	DB-624 0.18(mm)
MRL 240-378870/16 MDLV		04/30/2019 17:09	1		DB-624 0.18(mm)
STDA9 240-378870/18 IC		04/30/2019 17:52	1	U1269805.D	DB-624 0.18(mm)
STDA9 240-378870/19 IC		04/30/2019 18:14	1	U1269806a.D	DB-624 0.18(mm)
STDA9 240-378870/20 IC		04/30/2019 18:37	1	U1269807.D	DB-624 0.18(mm)
STDA9 240-378870/21 IC		04/30/2019 18:59	1	U1269808.D	DB-624 0.18(mm)
STDA9 240-378870/22 IC		04/30/2019 19:21	1	U1269809.D	DB-624 0.18(mm)
STDA9 240-378870/23 IC		04/30/2019 19:43	1	U1269810.D	DB-624 0.18(mm)
STDA9 240-378870/24 IC		04/30/2019 20:05	1	U1269811.D	DB-624 0.18(mm)
ICV 240-378870/25		04/30/2019 20:27	1		DB-624 0.18(mm)
MRL 240-378870/26 MDLV		04/30/2019 20:50	1		DB-624 0.18(mm)
ZZZZZ		04/30/2019 21:12	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Start Date: 07/16/2020 16:09

Analysis Batch Number: 442963 End Date: 07/16/2020 21:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-442963/1		07/16/2020 16:09	1	BFB4436a.D	DB-624 0.18(mm)
STD8260 240-442963/9 IC		07/16/2020 17:43	1	U1279113.D	DB-624 0.18(mm)
STD8260 240-442963/10 IC		07/16/2020 18:05	1	U1279114.D	DB-624 0.18(mm)
STD8260 240-442963/11 IC		07/16/2020 18:27	1	U1279115.D	DB-624 0.18(mm)
STD8260 240-442963/12 IC		07/16/2020 18:50	1	U1279116.D	DB-624 0.18(mm)
ICIS 240-442963/13		07/16/2020 19:12	1	U1279117.D	DB-624 0.18(mm)
STD8260 240-442963/14 IC		07/16/2020 19:35	1	U1279118.D	DB-624 0.18(mm)
STD8260 240-442963/15 IC		07/16/2020 19:57	1	U1279119.D	DB-624 0.18(mm)
STD8260 240-442963/16 IC		07/16/2020 20:20	1	U1279120.D	DB-624 0.18(mm)
ICV 240-442963/17		07/16/2020 20:43	1	U1279121.D	DB-624 0.18(mm)
MDLV 240-442963/18		07/16/2020 21:05	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/14/2020 17:20

Analysis Batch Number: 447281 End Date: 08/15/2020 03:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447281/1		08/14/2020 17:20	1	bfb599.d	DB-624 0.18(mm)
CCV 240-447281/3		08/14/2020 17:44	1	U1916360.d	DB-624 0.18(mm)
CCVIS 240-447281/4		08/14/2020 18:06	1	U1916361.d	DB-624 0.18(mm)
LCS 240-447281/5		08/14/2020 18:29	1	U1916362.d	DB-624 0.18(mm)
MRL 240-447281/6 MDLV		08/14/2020 18:51	1		DB-624 0.18(mm)
MRL 240-447281/7 MDLV		08/14/2020 19:13	1		DB-624 0.18(mm)
MB 240-447281/8		08/14/2020 19:36	1	U1916365.d	DB-624 0.18(mm)
ZZZZZ		08/14/2020 19:58	20		DB-624 0.18(mm)
ZZZZZ		08/14/2020 20:21	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 20:43	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 21:05	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 21:27	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 21:50	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 22:12	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 22:35	1		DB-624 0.18(mm)
ZZZZZ		08/14/2020 22:57	1		DB-624 0.18(mm)
240-134931-20		08/14/2020 23:20	1	U1916375.d	DB-624 0.18(mm)
240-134931-21		08/14/2020 23:42	1	U1916376.d	DB-624 0.18(mm)
240-134931-22		08/15/2020 00:04	1	U1916377.d	DB-624 0.18(mm)
240-134931-23		08/15/2020 00:27	1	U1916378.d	DB-624 0.18(mm)
240-134931-24		08/15/2020 00:49	1	U1916379.d	DB-624 0.18(mm)
240-134931-25		08/15/2020 01:12	1	U1916380.d	DB-624 0.18(mm)
240-134931-26		08/15/2020 01:34	1	U1916381.d	DB-624 0.18(mm)
240-134931-27		08/15/2020 01:57	1	U1916382.d	DB-624 0.18(mm)
240-134931-28		08/15/2020 02:19	1	U1916383.d	DB-624 0.18(mm)
240-134931-29		08/15/2020 02:41	1	U1916384.d	DB-624 0.18(mm)
ZZZZZ		08/15/2020 03:04	20		DB-624 0.18(mm)
ZZZZZ		08/15/2020 03:26	20		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/17/2020 17:02

Analysis Batch Number: 447506 End Date: 08/18/2020 04:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447506/1		08/17/2020 17:02	1	bfb600.d	DB-624 0.18(mm)
CCV 240-447506/3		08/17/2020 17:24	1	U1916390.d	DB-624 0.18(mm)
CCVIS 240-447506/4		08/17/2020 17:46	1	U1916391.d	DB-624 0.18(mm)
LCS 240-447506/5		08/17/2020 18:09	1	U1916392.d	DB-624 0.18(mm)
MRL 240-447506/6 MDLV		08/17/2020 18:31	1		DB-624 0.18(mm)
MRL 240-447506/7 MDLV		08/17/2020 18:53	1		DB-624 0.18(mm)
MB 240-447506/8		08/17/2020 19:16	1	U1916395.d	DB-624 0.18(mm)
ZZZZZ		08/17/2020 21:07	20		DB-624 0.18(mm)
200-54623-C-4 MS		08/17/2020 21:29	20	U1916401.d	DB-624 0.18(mm)
200-54623-C-4 MSD		08/17/2020 21:52	20	U1916402.d	DB-624 0.18(mm)
240-134931-1		08/17/2020 22:37	1	U1916404.d	DB-624 0.18(mm)
240-134931-2		08/17/2020 22:59	1	U1916405.d	DB-624 0.18(mm)
240-134931-3		08/17/2020 23:22	1	U1916406.d	DB-624 0.18(mm)
240-134931-4		08/17/2020 23:44	1	U1916407.d	DB-624 0.18(mm)
240-134931-5		08/18/2020 00:06	1	U1916408.d	DB-624 0.18(mm)
240-134931-6		08/18/2020 00:29	1	U1916409.d	DB-624 0.18(mm)
240-134931-7		08/18/2020 00:51	1	U1916410.d	DB-624 0.18(mm)
240-134931-8		08/18/2020 01:14	1	U1916411.d	DB-624 0.18(mm)
240-134931-9		08/18/2020 01:36	1	U1916412.d	DB-624 0.18(mm)
240-134931-10		08/18/2020 01:59	1	U1916413.d	DB-624 0.18(mm)
240-134931-18		08/18/2020 02:21	1	U1916414.d	DB-624 0.18(mm)
240-134931-19		08/18/2020 02:44	1	U1916415.d	DB-624 0.18(mm)
240-134931-30		08/18/2020 03:06	1	U1916416.d	DB-624 0.18(mm)
240-134931-31		08/18/2020 03:28	1	U1916417.d	DB-624 0.18(mm)
240-134931-32		08/18/2020 03:51	1	U1916418.d	DB-624 0.18(mm)
240-134931-33		08/18/2020 04:13	1	U1916419.d	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX19 Start Date: 08/18/2020 18:41

Analysis Batch Number: 447698 End Date: 08/19/2020 04:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447698/1		08/18/2020 18:41	1	bfb601.d	DB-624 0.18(mm)
CCV 240-447698/3		08/18/2020 19:05	1	U1916420.d	DB-624 0.18(mm)
CCVIS 240-447698/4		08/18/2020 19:27	1	U1916421.d	DB-624 0.18(mm)
LCS 240-447698/5		08/18/2020 19:50	1	U1916422.d	DB-624 0.18(mm)
MRL 240-447698/6 MDLV		08/18/2020 20:12	1		DB-624 0.18(mm)
MRL 240-447698/7 MDLV		08/18/2020 20:35	1		DB-624 0.18(mm)
MB 240-447698/8		08/18/2020 20:57	1	U1916425.d	DB-624 0.18(mm)
240-134931-1		08/18/2020 21:19	1	U1916426.d	DB-624 0.18(mm)
240-134931-2		08/18/2020 21:42	1	U1916427.d	DB-624 0.18(mm)
240-134931-3		08/18/2020 22:04	1	U1916428.d	DB-624 0.18(mm)
240-134931-4		08/18/2020 22:27	1	U1916429.d	DB-624 0.18(mm)
240-134931-5		08/18/2020 22:49	1	U1916430.d	DB-624 0.18(mm)
240-134931-6		08/18/2020 23:12	1	U1916431.d	DB-624 0.18(mm)
240-134931-8		08/18/2020 23:34	1	U1916432.d	DB-624 0.18(mm)
240-134931-9		08/18/2020 23:56	1	U1916433.d	DB-624 0.18(mm)
240-134931-10		08/19/2020 00:18	1	U1916434.d	DB-624 0.18(mm)
240-134931-18		08/19/2020 00:41	1	U1916435.d	DB-624 0.18(mm)
240-134931-19		08/19/2020 01:03	1	U1916436.d	DB-624 0.18(mm)
240-134931-30		08/19/2020 01:26	1	U1916437.d	DB-624 0.18(mm)
240-134931-31		08/19/2020 01:48	1	U1916438.d	DB-624 0.18(mm)
240-134931-32		08/19/2020 02:10	1	U1916439.d	DB-624 0.18(mm)
240-134931-33		08/19/2020 02:32	1	U1916440.d	DB-624 0.18(mm)
240-134931-11		08/19/2020 02:55	1	U1916441.d	DB-624 0.18(mm)
240-134931-12		08/19/2020 03:18	1	U1916442.d	DB-624 0.18(mm)
240-134931-13		08/19/2020 03:40	1	U1916443.d	DB-624 0.18(mm)
240-134931-14		08/19/2020 04:02	1	U1916444.d	DB-624 0.18(mm)
240-134931-15		08/19/2020 04:24	1	U1916445.d	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Instrument ID: A3UX12 Start Date: 08/19/2020 15:23

Analysis Batch Number: 447867 End Date: 08/20/2020 03:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-447867/1		08/19/2020 15:23	1	BFB4462.D	DB-624 0.18(mm)
CCV 240-447867/3		08/19/2020 15:46	1	U1279807.D	DB-624 0.18(mm)
CCVIS 240-447867/4		08/19/2020 16:09	1	U1279808.D	DB-624 0.18(mm)
LCS 240-447867/5		08/19/2020 16:31	1	U1279809.D	DB-624 0.18(mm)
MRL 240-447867/6 MDLV		08/19/2020 16:53	1		DB-624 0.18(mm)
MRL 240-447867/7 MDLV		08/19/2020 17:16	1		DB-624 0.18(mm)
MB 240-447867/8		08/19/2020 17:38	1	U1279812.D	DB-624 0.18(mm)
ZZZZZ		08/19/2020 20:38	12.5		DB-624 0.18(mm)
ZZZZZ		08/19/2020 21:00	125		DB-624 0.18(mm)
240-135021-B-1 MS		08/19/2020 21:22	125	U1279822a.D	DB-624 0.18(mm)
240-135021-B-1 MSD		08/19/2020 21:45	125	U1279823a.D	DB-624 0.18(mm)
ZZZZZ		08/19/2020 22:30	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 22:52	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 23:14	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 23:37	1		DB-624 0.18(mm)
ZZZZZ		08/19/2020 23:59	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 00:22	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 00:45	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 01:07	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 01:30	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 01:52	1		DB-624 0.18(mm)
ZZZZZ		08/20/2020 02:15	1		DB-624 0.18(mm)
240-134931-16		08/20/2020 02:37	1	U1279836.D	DB-624 0.18(mm)
240-134931-17		08/20/2020 03:00	1	U1279837.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 337917 Batch Start Date: 07/25/18 11:28 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00001	vm50ss_stk 00077	vmbfb 00020	VMFASA9W 00194
BFB 240-337917/1		8260C		5 mL	5 mL			1 uL	
STDA9 240-337917/8 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/9 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/10 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/11 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/12 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-337917/13 IC		8260C		5 mL	5 mL	2 uL			
ICV 240-337917/14		8260C		5 mL	5 mL	2 uL	2 uL		16 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmra9w 00259					
BFB 240-337917/1		8260C							
STDA9 240-337917/8 IC		8260C		64 uL					
STDA9 240-337917/9 IC		8260C		32 uL					
STDA9 240-337917/10 IC		8260C		16 uL					
STDA9 240-337917/11 IC		8260C		8 uL					
STDA9 240-337917/12 IC		8260C		0.8 uL					
STDA9 240-337917/13 IC		8260C		0.4 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 337917 Batch Start Date: 07/25/18 11:28 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmra9w 00259					
ICV 240-337917/14		8260C							

Batch Notes	
pH Indicator ID	HC746949

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 342719 Batch Start Date: 08/27/18 16:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00001	vm50ss 00333	vm50ss_stk 00077	vmarolistdw 00260
BFB 240-342719/1		8260C		5 mL	5 mL				
STD8260 240-342719/7 IC		8260C		5 mL	5 mL	2 uL	64 uL		64 uL
STD8260 240-342719/8 IC		8260C		5 mL	5 mL	2 uL	48 uL		48 uL
STD8260 240-342719/9 IC		8260C		5 mL	5 mL	2 uL	32 uL		32 uL
ICIS 240-342719/10		8260C		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-342719/11 IC		8260C		5 mL	5 mL	2 uL	8 uL		8 uL
STD8260 240-342719/12 IC		8260C		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD8260 240-342719/13 IC		8260C		5 mL	5 mL	2 uL	0.4 uL		0.4 uL
ICV 240-342719/14		8260C		5 mL	5 mL	2 uL		2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	vmfasaw 00246	vmfasgw 00271	vmfaspw 00264	vmrgas 00259	vmrprimw 00297
BFB 240-342719/1		8260C		1 uL					
STD8260 240-342719/7 IC		8260C						64 uL	64 uL
STD8260 240-342719/8 IC		8260C						48 uL	48 uL
STD8260 240-342719/9 IC		8260C						32 uL	32 uL
ICIS 240-342719/10		8260C						16 uL	16 uL
STD8260 240-342719/11 IC		8260C						8 uL	8 uL
STD8260 240-342719/12 IC		8260C						0.8 uL	0.8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 342719 Batch Start Date: 08/27/18 16:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	vmfasaw 00246	vmfasgw 00271	vmfaspw 00264	vmrgas 00259	vmrprimw 00297
STD8260 240-342719/13 IC		8260C						0.4 uL	0.4 uL
ICV 240-342719/14		8260C			16 uL	16 uL	16 uL		

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00003	vm50ss 00362	vm50ss_stk 00080	vmarolistdw 00294
BFB 240-378870/1		8260C		5 mL	5 mL				
STD8260 240-378870/8 IC		8260C		5 mL	5 mL	2 uL	64 uL		64 uL
STD8260 240-378870/9 IC		8260C		5 mL	5 mL	2 uL	48 uL		48 uL
STD8260 240-378870/10 IC		8260C		5 mL	5 mL	2 uL	32 uL		32 uL
ICIS 240-378870/11		8260C		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-378870/12 IC		8260C		5 mL	5 mL	2 uL	8 uL		8 uL
STD8260 240-378870/13 IC		8260C		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD8260 240-378870/14 IC		8260C		5 mL	5 mL	2 uL	0.4 uL		0.4 uL
ICV 240-378870/15		8260C		5 mL	5 mL	2 uL		2 uL	
STDA9 240-378870/18 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/19 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/20 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/21 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/22 IC		8260C		5 mL	5 mL	2 uL			
STDA9 240-378870/23 IC		8260C		5 mL	5 mL	2 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00003	vm50ss 00362	vm50ss_stk 00080	vmarolistdw 00294
STDA9 240-378870/24 IC		8260C		5 mL	5 mL	2 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00021	vmfasaw 00277	vmfasgw 00307	vmfaspw 00297	vmra9w 00295	vmrgas 00291
BFB 240-378870/1		8260C		1 uL					
STD8260 240-378870/8 IC		8260C							64 uL
STD8260 240-378870/9 IC		8260C							48 uL
STD8260 240-378870/10 IC		8260C							32 uL
ICIS 240-378870/11		8260C							16 uL
STD8260 240-378870/12 IC		8260C							8 uL
STD8260 240-378870/13 IC		8260C							0.8 uL
STD8260 240-378870/14 IC		8260C							0.4 uL
ICV 240-378870/15		8260C			16 uL	16 uL	16 uL		
STDA9 240-378870/18 IC		8260C						64 uL	
STDA9 240-378870/19 IC		8260C						48 uL	
STDA9 240-378870/20 IC		8260C						32 uL	
STDA9 240-378870/21 IC		8260C						16 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00021	vmfasaw 00277	vmfasgw 00307	vmfaspw 00297	vmra9w 00295	vmrgas 00291
STDA9 240-378870/22 IC		8260C						8 uL	
STDA9 240-378870/23 IC		8260C						0.8 uL	
STDA9 240-378870/24 IC		8260C						0.4 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00331					
BFB 240-378870/1		8260C							
STD8260 240-378870/8 IC		8260C		64 uL					
STD8260 240-378870/9 IC		8260C		48 uL					
STD8260 240-378870/10 IC		8260C		32 uL					
ICIS 240-378870/11		8260C		16 uL					
STD8260 240-378870/12 IC		8260C		8 uL					
STD8260 240-378870/13 IC		8260C		0.8 uL					
STD8260 240-378870/14 IC		8260C		0.4 uL					
ICV 240-378870/15		8260C							
STDA9 240-378870/18 IC		8260C							
STDA9 240-378870/19 IC		8260C							
STDA9 240-378870/20 IC		8260C							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 378870 Batch Start Date: 04/30/19 13:47 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00331					
STDA9 240-378870/21 IC		8260C							
STDA9 240-378870/22 IC		8260C							
STDA9 240-378870/23 IC		8260C							
STDA9 240-378870/24 IC		8260C							

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 442963 Batch Start Date: 07/16/20 16:09 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_a 00006	vm50ss 00410	vm50ss_stk 00085	vmarolistdw 00352
BFB 240-442963/1		8260C		5 mL	5 mL				
STD8260 240-442963/9 IC		8260C		5 mL	5 mL	2 uL	0.4 uL		0.4 uL
STD8260 240-442963/10 IC		8260C		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD8260 240-442963/11 IC		8260C		5 mL	5 mL	2 uL	4 uL		4 uL
STD8260 240-442963/12 IC		8260C		5 mL	5 mL	2 uL	8 uL		8 uL
ICIS 240-442963/13		8260C		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-442963/14 IC		8260C		5 mL	5 mL	2 uL	32 uL		32 uL
STD8260 240-442963/15 IC		8260C		5 mL	5 mL	2 uL	48 uL		48 uL
STD8260 240-442963/16 IC		8260C		5 mL	5 mL	2 uL	64 uL		64 uL
ICV 240-442963/17		8260C		5 mL	5 mL	2 uL		2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00336	vmfasgw 00367	vmfaspw 00358	VMRGAS 00347	vmrprimw 00394
BFB 240-442963/1		8260C		1 uL					
STD8260 240-442963/9 IC		8260C						0.4 uL	0.4 uL
STD8260 240-442963/10 IC		8260C						0.8 uL	0.8 uL
STD8260 240-442963/11 IC		8260C						4 uL	4 uL
STD8260 240-442963/12 IC		8260C						8 uL	8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 442963 Batch Start Date: 07/16/20 16:09 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00336	vmfasgw 00367	vmfaspw 00358	VMRGAS 00347	vmrprimw 00394
ICIS 240-442963/13		8260C						16 uL	16 uL
STD8260 240-442963/14 IC		8260C						32 uL	32 uL
STD8260 240-442963/15 IC		8260C						48 uL	48 uL
STD8260 240-442963/16 IC		8260C						64 uL	64 uL
ICV 240-442963/17		8260C			16 uL	16 uL	16 uL		

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447281 Batch Start Date: 08/14/20 17:20 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00007	vm50ss_stk 00085	vmarolistdw 00356
BFB 240-447281/1		8260C		5 mL	5 mL				
CCV 240-447281/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447281/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447281/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447281/8		8260C		5 mL	5 mL		2 uL	2 uL	
240-134931-B-20	MSA-SW42D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-21	MSA-SW43A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-22	MSA-SW43B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-23	MSA-SW43C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-24	MSA-SW43D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-25	MSA-SW44A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-26	MSA-SW44B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-27	MSA-SW44C-081220	8260C	T	5 mL	5 mL	6 SU	2 uL	2 uL	
240-134931-B-28	MSA-SW44D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-29	TB-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00339	vmfasgw 00371	vmfaspw 00362	vmra9w 00356	vmrgas 00350
BFB 240-447281/1		8260C		1 uL					
CCV 240-447281/3		8260C						16 uL	
CCVIS 240-447281/4		8260C							16 uL
LCS 240-447281/5		8260C			16 uL	16 uL	16 uL		
MB 240-447281/8		8260C							
240-134931-B-20	MSA-SW42D-081220	8260C	T						
240-134931-C-21	MSA-SW43A-081220	8260C	T						
240-134931-B-22	MSA-SW43B-081220	8260C	T						
240-134931-B-23	MSA-SW43C-081220	8260C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447281 Batch Start Date: 08/14/20 17:20 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00339	vmfasgw 00371	vmfaspw 00362	vmra9w 00356	vmrgas 00350
240-134931-B-24	MSA-SW43D-081220	8260C	T						
240-134931-C-25	MSA-SW44A-081220	8260C	T						
240-134931-B-26	MSA-SW44B-081220	8260C	T						
240-134931-B-27	MSA-SW44C-081220	8260C	T						
240-134931-B-28	MSA-SW44D-081220	8260C	T						
240-134931-A-29	TB-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447281/1		8260C							
CCV 240-447281/3		8260C							
CCVIS 240-447281/4		8260C		16 uL					
LCS 240-447281/5		8260C							
MB 240-447281/8		8260C							
240-134931-B-20	MSA-SW42D-081220	8260C	T						
240-134931-C-21	MSA-SW43A-081220	8260C	T						
240-134931-B-22	MSA-SW43B-081220	8260C	T						
240-134931-B-23	MSA-SW43C-081220	8260C	T						
240-134931-B-24	MSA-SW43D-081220	8260C	T						
240-134931-C-25	MSA-SW44A-081220	8260C	T						
240-134931-B-26	MSA-SW44B-081220	8260C	T						
240-134931-B-27	MSA-SW44C-081220	8260C	T						
240-134931-B-28	MSA-SW44D-081220	8260C	T						
240-134931-A-29	TB-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447281 Batch Start Date: 08/14/20 17:20 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447506 Batch Start Date: 08/17/20 17:02 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00007	vm50ss_stk 00085	vmarolistdw 00356
BFB 240-447506/1		8260C		5 mL	5 mL				
CCV 240-447506/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447506/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447506/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447506/8		8260C		5 mL	5 mL		2 uL	2 uL	
200-54623-C-4 MS		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
200-54623-C-4 MSD		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-1	MSA-SW37A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-2	MSA-SW37B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-3	MSA-SW37C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-4	MSA-SW37D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-5	MSA-SW38A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-6	MSA-SW38B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-7	MSA-SW38C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-8	MSA-SW38D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-9	MSA-SW40A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-10	MSA-SW40B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-18	MSA-SW42B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-19	MSA-SW42C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-30	MSA-SW46A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-31	MSA-SW47A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-32	MSA-SW48A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-33	MSA-SW49A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00371	vmfaspw 00362	vmra9w 00357	vmrgas 00351
BFB 240-447506/1		8260C		1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447506 Batch Start Date: 08/17/20 17:02 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00371	vmfaspw 00362	vmra9w 00357	vmrgas 00351
CCV 240-447506/3		8260C						16 uL	
CCVIS 240-447506/4		8260C							16 uL
LCS 240-447506/5		8260C			16 uL	16 uL	16 uL		
MB 240-447506/8		8260C							
200-54623-C-4 MS		8260C	T		16 uL	16 uL	16 uL		
200-54623-C-4 MSD		8260C	T		16 uL	16 uL	16 uL		
240-134931-A-1	MSA-SW37A-081220	8260C	T						
240-134931-B-2	MSA-SW37B-081220	8260C	T						
240-134931-B-3	MSA-SW37C-081220	8260C	T						
240-134931-A-4	MSA-SW37D-081220	8260C	T						
240-134931-A-5	MSA-SW38A-081220	8260C	T						
240-134931-A-6	MSA-SW38B-081220	8260C	T						
240-134931-B-7	MSA-SW38C-081220	8260C	T						
240-134931-A-8	MSA-SW38D-081220	8260C	T						
240-134931-B-9	MSA-SW40A-081220	8260C	T						
240-134931-B-10	MSA-SW40B-081220	8260C	T						
240-134931-B-18	MSA-SW42B-081220	8260C	T						
240-134931-B-19	MSA-SW42C-081220	8260C	T						
240-134931-B-30	MSA-SW46A-081220	8260C	T						
240-134931-B-31	MSA-SW47A-081220	8260C	T						
240-134931-A-32	MSA-SW48A-081220	8260C	T						
240-134931-B-33	MSA-SW49A-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447506/1		8260C							
CCV 240-447506/3		8260C							
CCVIS 240-447506/4		8260C		16 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447506 Batch Start Date: 08/17/20 17:02 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
LCS 240-447506/5		8260C							
MB 240-447506/8		8260C							
200-54623-C-4 MS		8260C	T						
200-54623-C-4 MSD		8260C	T						
240-134931-A-1	MSA-SW37A-081220	8260C	T						
240-134931-B-2	MSA-SW37B-081220	8260C	T						
240-134931-B-3	MSA-SW37C-081220	8260C	T						
240-134931-A-4	MSA-SW37D-081220	8260C	T						
240-134931-A-5	MSA-SW38A-081220	8260C	T						
240-134931-A-6	MSA-SW38B-081220	8260C	T						
240-134931-B-7	MSA-SW38C-081220	8260C	T						
240-134931-A-8	MSA-SW38D-081220	8260C	T						
240-134931-B-9	MSA-SW40A-081220	8260C	T						
240-134931-B-10	MSA-SW40B-081220	8260C	T						
240-134931-B-18	MSA-SW42B-081220	8260C	T						
240-134931-B-19	MSA-SW42C-081220	8260C	T						
240-134931-B-30	MSA-SW46A-081220	8260C	T						
240-134931-B-31	MSA-SW47A-081220	8260C	T						
240-134931-A-32	MSA-SW48A-081220	8260C	T						
240-134931-B-33	MSA-SW49A-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447698 Batch Start Date: 08/18/20 18:41 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00007	vm50ss_stk 00085	vmarolistdw 00356
BFB 240-447698/1		8260C		5 mL	5 mL				
CCV 240-447698/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447698/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447698/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447698/8		8260C		5 mL	5 mL		2 uL	2 uL	
240-134931-B-1	MSA-SW37A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-2	MSA-SW37B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-3	MSA-SW37C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-4	MSA-SW37D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-5	MSA-SW38A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-6	MSA-SW38B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-8	MSA-SW38D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-9	MSA-SW40A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-10	MSA-SW40B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-18	MSA-SW42B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-19	MSA-SW42C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-30	MSA-SW46A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-31	MSA-SW47A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-C-32	MSA-SW48A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-33	MSA-SW49A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-11	MSA-SW40C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-A-12	MSA-SW40D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-13	MSA-SW41A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-14	MSA-SW41B-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-15	MSA-SW41C-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00372	vmfaspw 00362	vmra9w 00357	vmrgas 00351
BFB 240-447698/1		8260C		1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447698 Batch Start Date: 08/18/20 18:41 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00372	vmfaspw 00362	vmra9w 00357	vmrgas 00351
CCV 240-447698/3		8260C						16 uL	
CCVIS 240-447698/4		8260C							16 uL
LCS 240-447698/5		8260C			16 uL	16 uL	16 uL		
MB 240-447698/8		8260C							
240-134931-B-1	MSA-SW37A-081220	8260C	T						
240-134931-A-2	MSA-SW37B-081220	8260C	T						
240-134931-A-3	MSA-SW37C-081220	8260C	T						
240-134931-B-4	MSA-SW37D-081220	8260C	T						
240-134931-C-5	MSA-SW38A-081220	8260C	T						
240-134931-B-6	MSA-SW38B-081220	8260C	T						
240-134931-B-8	MSA-SW38D-081220	8260C	T						
240-134931-A-9	MSA-SW40A-081220	8260C	T						
240-134931-A-10	MSA-SW40B-081220	8260C	T						
240-134931-C-18	MSA-SW42B-081220	8260C	T						
240-134931-C-19	MSA-SW42C-081220	8260C	T						
240-134931-C-30	MSA-SW46A-081220	8260C	T						
240-134931-A-31	MSA-SW47A-081220	8260C	T						
240-134931-C-32	MSA-SW48A-081220	8260C	T						
240-134931-A-33	MSA-SW49A-081220	8260C	T						
240-134931-A-11	MSA-SW40C-081220	8260C	T						
240-134931-A-12	MSA-SW40D-081220	8260C	T						
240-134931-B-13	MSA-SW41A-081220	8260C	T						
240-134931-B-14	MSA-SW41B-081220	8260C	T						
240-134931-B-15	MSA-SW41C-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447698/1		8260C							
CCV 240-447698/3		8260C							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447698 Batch Start Date: 08/18/20 18:41 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
CCVIS 240-447698/4		8260C		16 uL					
LCS 240-447698/5		8260C							
MB 240-447698/8		8260C							
240-134931-B-1	MSA-SW37A-081220	8260C	T						
240-134931-A-2	MSA-SW37B-081220	8260C	T						
240-134931-A-3	MSA-SW37C-081220	8260C	T						
240-134931-B-4	MSA-SW37D-081220	8260C	T						
240-134931-C-5	MSA-SW38A-081220	8260C	T						
240-134931-B-6	MSA-SW38B-081220	8260C	T						
240-134931-B-8	MSA-SW38D-081220	8260C	T						
240-134931-A-9	MSA-SW40A-081220	8260C	T						
240-134931-A-10	MSA-SW40B-081220	8260C	T						
240-134931-C-18	MSA-SW42B-081220	8260C	T						
240-134931-C-19	MSA-SW42C-081220	8260C	T						
240-134931-C-30	MSA-SW46A-081220	8260C	T						
240-134931-A-31	MSA-SW47A-081220	8260C	T						
240-134931-C-32	MSA-SW48A-081220	8260C	T						
240-134931-A-33	MSA-SW49A-081220	8260C	T						
240-134931-A-11	MSA-SW40C-081220	8260C	T						
240-134931-A-12	MSA-SW40D-081220	8260C	T						
240-134931-B-13	MSA-SW41A-081220	8260C	T						
240-134931-B-14	MSA-SW41B-081220	8260C	T						
240-134931-B-15	MSA-SW41C-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447867 Batch Start Date: 08/19/20 15:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_a 00007	vm50ss_stk 00085	vmarolistdw 00357
BFB 240-447867/1		8260C		5 mL	5 mL				
CCV 240-447867/3		8260C		5 mL	5 mL		2 uL		
CCVIS 240-447867/4		8260C		5 mL	5 mL		2 uL	2 uL	16 uL
LCS 240-447867/5		8260C		5 mL	5 mL		2 uL	2 uL	
MB 240-447867/8		8260C		5 mL	5 mL		2 uL	2 uL	
240-135021-B-1 MS		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-135021-B-1 MSD		8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-16	MSA-SW41D-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-134931-B-17	MSA-SW42A-081220	8260C	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00025	vmfasaw 00340	vmfasgw 00372	vmfaspw 00362	vmra9w 00357	vmrgas 00351
BFB 240-447867/1		8260C		1 uL					
CCV 240-447867/3		8260C						16 uL	
CCVIS 240-447867/4		8260C							16 uL
LCS 240-447867/5		8260C			16 uL	16 uL	16 uL		
MB 240-447867/8		8260C							
240-135021-B-1 MS		8260C	T		16 uL	16 uL	16 uL		
240-135021-B-1 MSD		8260C	T		16 uL	16 uL	16 uL		
240-134931-B-16	MSA-SW41D-081220	8260C	T						
240-134931-B-17	MSA-SW42A-081220	8260C	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
BFB 240-447867/1		8260C							
CCV 240-447867/3		8260C							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-134931-1

SDG No.: MSA Frog Mortar Creek

Batch Number: 447867 Batch Start Date: 08/19/20 15:23 Batch Analyst: Lavey, Tim

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmrprimw 00399					
CCVIS 240-447867/4		8260C		16 uL					
LCS 240-447867/5		8260C							
MB 240-447867/8		8260C							
240-135021-B-1 MS		8260C	T						
240-135021-B-1 MSD		8260C	T						
240-134931-B-16	MSA-SW41D-081220	8260C	T						
240-134931-B-17	MSA-SW42A-081220	8260C	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

1-7626

Baltimore
#201

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Josh Mullis	Site Contact: Josh Mullis	Date: 8/12/2020	COC No:
Tetra Tech	Tel/Fax: 410-279-2700	Lab Contact: Roxanne C.	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 STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: J Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC09023	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Sample Specific Notes:
MSA-SW37A-081220	8/12/2020	1018	SW	Water	3		x	
MSA-SW37B-081220	8/12/2020	1021	SW	Water	3		x	
MSA-SW37C-081220	8/12/2020	1023	SW	Water	3		x	
MSA-SW37D-081220	8/12/2020	1025	SW	Water	3		x	
MSA-SW38A-081220	8/12/2020	0933	SW	Water	3		x	
MSA-SW38B-081220	8/12/2020	0936	SW	Water	3		x	
MSA-SW38C-081220	8/12/2020	0939	SW	Water	3		x	
MSA-SW38D-081220	8/12/2020	0941	SW	Water	3		x	
MSA-SW40A-081220	8/12/2020	0951	SW	Water	3		x	
MSA-SW40B-081220	8/12/2020	0953	SW	Water	3		x	
MSA-SW40C-081220	8/12/2020	0956	SW	Water	3		x	
MSA-SW40D-081220	8/12/2020	0959	SW	Water	3		x	
							2	



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~~

JAM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/12/20 1415		ETA Lab	8/12/20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	8/12/20 1700	ETA Lab		ETA	8-13-20 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

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08/23/2020

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

1-7/2.6

Baltimore
#201

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Josh Mullis	Site Contact: Josh Mullis	Date: 8/12/2020	COC No:
Tetra Tech	Tel/Fax: 410-279-2700	Lab Contact: Roxanne C.	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: STANDARD			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler: J Mullis
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC09023	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)
MSA-SW41A-081220	8/12/2020	0917	SW	Water	3		x
MSA-SW41B-081220	8/12/2020	0920	SW	Water	3		x
MSA-SW41C-081220	8/12/2020	0922	SW	Water	3		x
MSA-SW41D-081220	8/12/2020	0925	SW	Water	3		x
MSA-SW42A-081220	8/12/2020	1006	SW	Water	3		x
MSA-SW42B-081220	8/12/2020	1008	SW	Water	3		x
MSA-SW42C-081220	8/12/2020	1010	SW	Water	3		x
MSA-SW42D-081220	8/12/2020	1013	SW	Water	3		x
MSA-SW43A-081220	8/12/2020	0903	SW	Water	3		x
MSA-SW43B-081220	8/12/2020	0905	SW	Water	3		x
MSA-SW43C-081220	8/12/2020	0907	SW	Water	3		x
MSA-SW43D-081220	8/12/2020	0910	SW	Water	3		x
							2

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~~ JAM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/12/2020 1715		ETA Lab	8/12/20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	8/10/20 17:a	ETA Lab		ETA	8-13-20 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

08/23/2020

Baltimore
1-7/26 #201

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Client Contact	Project Manager: Josh Mullis	Site Contact: Josh Mullis	Date: 8/12/2020	COC No:
Tetra Tech	Tel/Fax: 410-279-2700	Lab Contact: Roxanne C.	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: STANDARD			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
Project # 112IC09023	☐ 1 day			Sampler: J Mullis

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs + Freon 113/22 + TIC (8260C)	Sample Specific Notes:
MSA-SW44A-081220	8/12/2020	0847	SW	Water	3		x	
MSA-SW44B-081220	8/12/2020	0851	SW	Water	3		x	
MSA-SW44C-081220	8/12/2020	0854	SW	Water	3		x	
MSA-SW44D-081220	8/12/2020	0858	SW	Water	3		x	
TB-081220	8/12/2020	0000	SW	Water	3		x	
MSA-SW46A-081220	8/12/2020	1002	SW	Water	3		x	
MSA-SW47A-081220	8/12/2020	0946	SW	Water	3		x	
MSA-SW48A-081220	8/12/2020	0929	SW	Water	3		x	
MSA-SW49A-081220	8/12/2020	0914	SW	Water	3		x	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2

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~~ JAM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	8/12/2020 1415		ETA by 17	8/12/20
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	8/12/20 17:00	ETA by 10		ETA	8/13/20 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 134931**
Canton Facility

Client Tetra Tech Site Name

Cooler Received on 8-13-20 Opened on 8-13-20

Cooler unpacked by: Matt Snyder

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. 1.7 °C Corrected Cooler Temp 2.6 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC911298
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:

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:

APPENDIX C—CHEMICAL-RESULTS DATA TABLE

LOCATION	MSA-SW37A	MSA-SW37B	MSA-SW37C	MSA-SW37D	MSA-SW38A	MSA-SW38B	MSA-SW38C	MSA-SW38D	MSA-SW40A	MSA-SW40B
SAMPLE ID	MSA-SW37A-081220	MSA-SW37B-081220	MSA-SW37C-081220	MSA-SW37D-081220	MSA-SW38A-081220	MSA-SW38B-081220	MSA-SW38C-081220	MSA-SW38D-081220	MSA-SW40A-081220	MSA-SW40B-081220
SAMPLE DATE	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
VOLATILES (UG/L)										
1,1,1,2-TETRACHLOROETHANE	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
1,1,1-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	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 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	0.41 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-DICHLOROETHENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,1-DICHLOROPROPENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 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	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,2,3-TRIMETHYLBENZENE	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,4-TRICHLOROBENZENE	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,2,4-TRIMETHYLBENZENE	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
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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-DICHLOROBENZENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-DICHLOROETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-DICHLOROPROPANE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,3-DICHLOROBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 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	0.37 U	0.37 U	0.37 U	0.37 U	0.46 J	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
2,2-DICHLOROPROPANE	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ
2-BUTANONE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2-CHLOROETHYL VINYL ETHER	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR
2-CHLOROTOLUENE	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
2-HEXANONE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
4-CHLOROTOLUENE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
4-ISOPROPYLTOLUENE	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
4-METHYL-2-PENTANONE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ACETONE	17 J	6.7 J	6.6 J	6.4 J	9.3 J	8.4 J	5.4 UJ	6.7 J	10 J	7.2 J
BENZENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BROMOBENZENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BROMOCHLOROMETHANE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
BROMODICHLOROMETHANE	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
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	0.32 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
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	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
CHLOROMETHANE	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
CIS-1,2-DICHLOROETHENE	0.38 U	0.38 U	0.38 U	0.38 U	0.62 J	0.38 U	0.38 U	0.38 U	0.38 U	0.38 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	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 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	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
ETHYL TERT-BUTYL ETHER	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
ETHYLBENZENE	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
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	0.45 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
M+P-XYLENES	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
METHYL TERT-BUTYL ETHER	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
METHYLENE CHLORIDE	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
NAPHTHALENE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
N-BUTYLBENZENE	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
N-PROPYLBENZENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
O-XYLENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
SEC-BUTYLBENZENE	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
STYRENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TERT-AMYL METHYL ETHER	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
TERT-BUTYLBENZENE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
TERTIARY-BUTYL ALCOHOL	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ
TETRACHLOROETHENE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
TOLUENE	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
TOTAL XYLENES	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
TRANS-1,2-DICHLOROETHENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 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	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 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
UNKNOWN	-	-	-	-	-	-	-	-	-	-
VINYL ACETATE	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
VINYL CHLORIDE	0.5 U	0.5 U	0.61	0.5 U	0.51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

All samples were collected on August 12, 2020.
-- - not detected
J - estimated concentration
NA - not available
NJ - tentatively identified at estimated concentration
SW - surface water
U - nondetect
ug/L - micrograms per liter

LOCATION	MSA-SW40C	MSA-SW40D	MSA-SW41A	MSA-SW41B	MSA-SW41C	MSA-SW41D	MSA-SW42A	MSA-SW42B	MSA-SW42C	MSA-SW42D
SAMPLE ID	MSA-SW40C-081220	MSA-SW40D-081220	MSA-SW41A-081220	MSA-SW41B-081220	MSA-SW41C-081220	MSA-SW41D-081220	MSA-SW42A-081220	MSA-SW42B-081220	MSA-SW42C-081220	MSA-SW42D-081220
SAMPLE DATE	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
VOLATILES (UG/L)										
1,1,1,2-TETRACHLOROETHANE	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
1,1,1-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	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 UJ	0.56 U	0.56 U	0.56 UJ	0.56 UJ	0.56 U
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	0.41 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-DICHLOROETHENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,1-DICHLOROPROPENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 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	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,2,3-TRIMETHYLBENZENE	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,4-TRICHLOROBENZENE	0.81 UJ	0.81 UJ	0.81 UJ	0.81 UJ	0.81 UJ	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,2,4-TRIMETHYLBENZENE	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
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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-DICHLOROBENZENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-DICHLOROETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-DICHLOROPROPANE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,3-DICHLOROBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 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	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
2,2-DICHLOROPROPANE	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 UJ	0.95 UJ	0.95 U
2-BUTANONE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2-CHLOROETHYL VINYL ETHER	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR
2-CHLOROTOLUENE	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
2-HEXANONE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
4-CHLOROTOLUENE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
4-ISOPROPYLTOLUENE	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
4-METHYL-2-PENTANONE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ACETONE	8 J	5.7 J	9.2 J	8.7 J	7.1 J	5.4 U	11	8.1 J	7.6 J	5.4 UJ
BENZENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BROMOBENZENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BROMOCHLOROMETHANE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
BROMODICHLOROMETHANE	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
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	0.32 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
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	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
CHLOROMETHANE	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
CIS-1,2-DICHLOROETHENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 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	0.33 UJ	0.33 UJ	0.33 UJ	0.33 UJ	0.33 UJ	0.33 U	0.33 U	0.33 U	0.33 U	0.33 UJ
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	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
ETHYL TERT-BUTYL ETHER	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
ETHYLBENZENE	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
HEXACHLOROBUTADIENE	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 UJ	0.83 U	0.83 U	0.83 UJ	0.83 UJ	0.83 UJ
ISOPROPYLBENZENE	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
M+P-XYLENES	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
METHYL TERT-BUTYL ETHER	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
METHYLENE CHLORIDE	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
NAPHTHALENE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
N-BUTYLBENZENE	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
N-PROPYLBENZENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
O-XYLENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
SEC-BUTYLBENZENE	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
STYRENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TERT-AMYL METHYL ETHER	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
TERT-BUTYLBENZENE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
TERTIARY-BUTYL ALCOHOL	1.7 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
TETRACHLOROETHENE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
TOLUENE	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
TOTAL XYLENES	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
TRANS-1,2-DICHLOROETHENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 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	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 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
UNKNOWN	--	--	--	--	--	8.7 NJ	--	--	--	--
VINYL ACETATE	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
VINYL CHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

All samples were collected on August 12, 2020.
-- - not detected
J - estimated concentration
NA - not available
NJ - tentatively identified at estimated concentration
SW - surface water
U - nondetect
ug/L - micrograms per liter

Appendix C - Full Analytical Results August 2020

LOCATION	MSA-SW43A	MSA-SW43B	MSA-SW43C	MSA-SW43D	MSA-SW44A	MSA-SW44B	MSA-SW44C	MSA-SW44D	MSA-SW46A	MSA-SW47A	MSA-SW48A	MSA-SW49A
SAMPLE ID	MSA-SW43A-081220	MSA-SW43B-081220	MSA-SW43C-081220	MSA-SW43D-081220	MSA-SW44A-081220	MSA-SW44B-081220	MSA-SW44C-081220	MSA-SW44D-081220	MSA-SW46A-081220	MSA-SW47A-081220	MSA-SW48A-081220	MSA-SW49A-081220
SAMPLE DATE	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812	20200812
VOLATILES (UG/L)												
1,1,1,2-TETRACHLOROETHANE	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
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
1,1,2,2-TETRACHLOROETHANE	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U	0.56 UJ	0.56 UJ	0.56 UJ	0.56 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	0.41 U	0.41 U
1,1-DICHLOROETHANE	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
1,1-DICHLOROETHENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
1,1-DICHLOROPROPENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 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	0.54 U	0.54 U
1,2,3-TRICHLOROPROPANE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
1,2,3-TRIMETHYLBENZENE	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2,4-TRICHLOROBENZENE	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,2,4-TRIMETHYLBENZENE	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
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
1,2-DIBROMOETHANE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-DICHLOROBENZENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-DICHLOROETHANE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-DICHLOROPROPANE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,3-DICHLOROBENZENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 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	0.21 U	0.21 U
1,4-DICHLOROBENZENE	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
2,2-DICHLOROPROPANE	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 UJ	0.95 UJ	0.95 UJ	0.95 UJ
2-BUTANONE	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2-CHLOROETHYL VINYL ETHER	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR
2-CHLOROTOLUENE	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
2-HEXANONE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
4-CHLOROTOLUENE	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
4-ISOPROPYLTOLUENE	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
4-METHYL-2-PENTANONE	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
ACETONE	10 J	9.1 J	7.1 J	6.7 J	10 J	6.6 J	6.3 J	5.4 UJ	12 J	10 J	11 J	12 J
BENZENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BROMOBENZENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
BROMOCHLOROMETHANE	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
BROMODICHLOROMETHANE	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
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
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
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
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
CHLOROBENZENE	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
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
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
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
CHLOROFORM	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
CHLOROMETHANE	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
CIS-1,2-DICHLOROETHENE	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.72 J	0.42 J	0.38 U	0.5 J
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
DIBROMOMETHANE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 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	0.35 U	0.35 U
DIISOPROPYL ETHER	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
ETHYL TERT-BUTYL ETHER	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
ETHYLBENZENE	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
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
ISOPROPYLBENZENE	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
M+P-XYLENES	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
METHYL TERT-BUTYL ETHER	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
METHYLENE CHLORIDE	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
NAPHTHALENE	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
N-BUTYLBENZENE	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
N-PROPYLBENZENE	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
O-XYLENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
SEC-BUTYLBENZENE	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
STYRENE	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
TERT-AMYL METHYL ETHER	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
TERT-BUTYLBENZENE	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
TERTIARY-BUTYL ALCOHOL	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ	1.7 UJ
TETRACHLOROETHENE	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
TOLUENE	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
TOTAL XYLENES	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
TRANS-1,2-DICHLOROETHENE	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 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	0.67 U	0.67 U
TRICHLOROETHENE	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 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	0.45 U	0.45 U
UNKNOWN	--	--	--	--	--	--	--	--	--	--	--	--
VINYL ACETATE	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
VINYL CHLORIDE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56	0.5 U	0.5 U	0.5 U

All samples were collected on August 12, 2020.
-- - not detected
J - estimated concentration
NA - not available
NJ - tentatively identified at estimated concentration
SW - surface water
U - nondetect
ug/L - micrograms per liter